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GIRLS' ATTAINMENT IN BASIC LITERACY AND EDUCATION (GABLE)

VOLUME II: ANNEXES:
SUPPLEMENTARY APPROVAL DOCUMENTATION

NPA Number: 612-0240

Project Number: 612-0237

USAID/MALAWI

September 1991

MALAWI
GIRLS' ATTAINMENT IN BASIC LITERACY AND EDUCATION
(GABLE)

612-0237 PA 612-0240 NPA

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ANNEX A

THE LOGICAL FRAMEWORK

SEPTEMBER 30, 1991

GIRLS' ATTAINMENT IN BASIC LITERACY AND EDUCATION
PROGRAM DESCRIPTION SUMMARY
LOGICAL FRAMEWORK

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORANT ASSUMPTIONS
Program/Sector Goal: To decrease fertility rates among Malawians through greater educational attainment of girls.	Measures of Goal Achievement: Decrease fertility rates.	Population/health statistics	The correlation between girls' primary education and reduced fertility is valid and will continue.
Program/Project Purposes: To increase girls attainment in basic education.	End of Program Status: Increase percentage of girls in each standard.	GOM records/statistics.	Opportunity costs for girls' labor do no increase
Outputs: A. Increased financial resources base and improved efficiency of the education sector	Magnitude of Outputs: Increased share of GOM allocation to education by 5 percentage points. Increased share of MOEC allocation to primary education by 16 percentage points. Reduced cycle cost per primary graduate. Reduced number of pupil years to produce Standard 8 graduate. Repetition rate reduced by 25% per standard.	GOM budget GOM records/statistics Monitoring and evaluation system	GOM financed commitment to primary education. Timely release of funds by GOM to MOEC and parastatals. Primary enrollment does not increase dramatically. Costs per pupil do not increase significantly.
B. Improved quality of primary education system	More classrooms & teachers' houses. More students in teacher training colleges.		

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	Increased supplies of educational materials through competitive procedures and distribution system.		
C. Improved access to quality education for girls	More girls enrolled in school. School fee waivers for all girls in Standards 2–8 who don't repeat. Revised gender–appropriate curriculum used in primary schools, TTCs, and in–service training. Reduced repetition rates at girls. Increased percentage of girls in secondary schools.		
D. More positive attitudes towards the benefit of primary education in girls	Singificant KAP changes towards girls' education.	KAPs survey (social mobilization campaign)	
Inputs: A.I.D. – Cash grant – TA (Management, monitoring and evaluation, studies, mobilization campaign) – Commodities GOM: – Construction – Salaries – Tuition fees – Training – Logistical support	Magnitudes of Inputs: A.I.D. $14 million program grant $ 6 million project grant $20 million total GOM $14.25 million	A.I.D. documentation and records. GOM budget and expenditure reports. GOM audits.	Financing available to A.I.D. and GOM.

ANNEX B

INITIAL ENVIRONMENTAL EXAMINATION

SEPTEMBER 30, 1991

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INITIAL ENVIRONMENTAL EXAMINATION

I. Project Data

Project Location:	Malawi
Project Title and Number:	Girls' Attainment in Basic Literacy and Education, 612-0237 (PA) and 612-0240 (NPA)
Funding:	$20,000,000
Life of Project:	Six years
IEE Prepared By:	Stephen T. Norton Chief, Project Implementation and Development Office, USAID/Malawi
Recommended Threshold Decision:	Negative Determination
Concurrence:	Carol A. Peasley Director, USAID/Malawi
Date:	20 June 1991
Concurrence by Africa Bureau Environmental Officer:	Approved: ✓ Disapproved: _____ Date: 9 July 1991

Clearance: GC/AFR M.B. Kaufman Date: 7/26/91

Clearances: Joan Larcom, HRDO USAID/Malawi: Draft 10 June 91
Kenneth Rikard, Deputy Director USAID/Malawi: [illegible] 25 June 91
Robert Rose, REDSO/ESA/ENG: Draft I. Chaudhry 14 June 91
Richard Pollak, REDSO/ESA/ANR: Draft 20 June 91

II. Program Goal and Purpose

The goal of the Girls' Attainment in Basic Literacy and Education (GABLE) Program is to decrease fertility rates among Malawians through greater educational attainment of girls. The purpose of GABLE is to increase girls' attainment in basic education. The purpose will be achieved by reducing schooling costs to parents, improving the quality of education by reducing class size, providing classrooms and learning materials, and positively influencing socio-cultural perceptions that discourage girls from attending school and becoming literate.

III. Program Problem

Most girls are not attending school in Malawi. Even among those who do, over half of them are leaving school during the crucial early primary grades before they have had enough education to become fully literate.

Malawi's educational system is plagued by high repetition rates, even higher drop out rates and mediocre achievement records. While this inefficiency hinders learning among all school children, girls are particularly hampered by the system's weakness. While the genders enter Standard 1 in roughly the same numbers (47% girls:53% boys), girls are nearly twice as likely as boys to leave school prematurely. Overall, there are 130,000 more boys than girls attending primary school.

Fifty percent more boys than girls reach the final year of primary school. Family obligations, school expenses, poor school quality, and a dearth of post-primary opportunities discourage girls in particular from persisting in the school system. Huge classes with few teachers, even fewer classrooms, and shortages of educational materials characterize the bleak environment of the early primary grades and contribute to a low literacy rate of 31% among Malawian women.

IV. Program Outline and Strategy

The GABLE Program encompasses a program of policy reform in the education sector and complementary project assistance. The precise nature of activities and mix of project and program resources are likely to change some as a result of the future dialogue with Government of Malawi (GOM) and other donors prior to and during the preparation of the PAAD. Because this is USAID/Malawi's first program in the education sector and our knowledge of the sector is still limited, GABLE will not engage in a wide array of activities never before financed by the GOM and other donors. Therefore, GABLE will piggyback on several policy reforms and activities that the World Bank is supporting, while engaging in a limited scope of new activities.

The Program will focus on the following four objectives:

1. increase the long-term financial resource base and internal efficiency of the education sector;
2. improve the quality of primary education;
3. improve girls' access to and quality of education; and
4. enhance the institutional commitment of the educational system to plan, manage and evaluate policies which impact girls' primary education.

Project assistance will be coupled when appropriate with policy measures to complement the Program's objectives and increase its impacts. Local currency which may be ~~"generated" from~~ deposited under the Program would be used to increase the GOM's budgetary allocations for items such as construction of simple classrooms, learning materials, and training of teachers.

V. Environmental Action Recommended

As demonstrated by the above description, the Program's activities will not have a direct effect on Malawi's natural or physical environment. Additionally, an education program such as GABLE is normally categorically excluded and not subject to the IEE procedures, except when such a program includes activities directly affecting the environment, e.g. construction of facilities. If determined appropriate during the PAAD design, the local currencies ~~"generated"~~ ~~under the~~ deposited Program and owned by the GOM may be used to finance the construction of single block classrooms and/or teachers' houses by local communities and the Ministry of Education.

Even though Regulation 16 and its environmental procedures do not apply to host country-owned local currencies, the Mission will pay particular attention to the GOM's environmental protection and mitigation procedures in the local currency programming process during the Program's design and implementation. Specifically, the PAAD design team will review the capabilities and procedures of the Ministry of Education's Project Implementation Unit which is responsible for design and construction oversight for the nation's school classrooms and teachers' houses. If determined necessary by the PAAD analysis, the Mission will arrange for appropriate engineering and environmental staff assistance from REDSO/ESA to provide the required technical guidance and support throughout the Program's implementation.

This examination also has taken into consideration the new Section 496 (h)(2)(B) of the Foreign Assistance Act of 1991 regarding the protection of vulnerable groups. The Program's anticipated reforms, however, will not result in any negative consequences to our long-term environmental interests.

Therefore, in light of the nature of the Program and the envisioned role which USAID would play in the local currency programming process, a Negative Determination is recommended.

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ANNEX C

GOVERNMENT OF MALAWI
LETTER OF INTENT

SEPTEMBER 30, 1991

Telegrams: Finance, Lilongwe
Telephone: Lilongwe 731 311
Telex: 44407

MINISTRY OF FINANCE
P.O. BOX 30049
LILONGWE 3
MALAWI

REF. NO. USA/38/10 19th September, 1991

The Mission Director,
USAID,
P.O. Box 30455,
LILONGWE 3

Dear Madam,

RE : GIRLS ATTAINMENT IN BASIC LITERACY AND EDUCATION (GABLE)

The Government of Malawi formally requests the assistance of the United States Government through USAID to undertake a series of reforms and activities to improve primary education in Malawi. Over the past several months USAID Officials and consultants have been discussing with Ministry of Education and Culture and other GOM officials ways to improve primary education, in particular primary education for girls, under a program entitled Girls' Attainment in Basic Literacy and Education (GABLE). GOM Officials have worked closely with USAID Officials on preparation of the final document through a working group consisting of representatives of the MOEC, Malawi Institute of Education, Department of Economic Planning and Development, Ministry of Finance, Ministry of Community Services, Ministry of Justice, and USAID.

Based on our discussions to date the GOM is prepared to undertake the activities of the GABLE Program based on the provision by USAID of US$ 14 million in budget resources to the GOM and another US$ 6 million to fund project activities.

The GABLE program is directly supportive of GOM objectives in primary education as stated in the Education Development Plan 1985-1995 and in the paper prepared by the Government entitled Towards Education for All. The Government recognizes that the resources required to improve the quality of education and keep pace with the growing school age population have not been sufficient. The under-funding of the education sector has led to shortages of classrooms, teachers, and learning materials. In fact, recurrent expenditure on education as a percentage of national recurrent expenditure has declined consistently over the 10-year period from 1978 to 1988, averaging 10.8 percent per

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annum against a target of at least 15 percent. The Government is committed to reversing this trend and increasing the education sector's share of the budget. USAID's resources provided under GABLE will assist the Government in its efforts to increase support to the education sector. In particular the GABLE program will contribute to the GOM objectives of:

- increasing the percentage of school age children enrolled in primary school and in particular increasing the enrollment of girls;

- reducing the pupil-teacher ratio by training more teachers;

- reducing the pupil-classroom ratio by building more school blocks and teachers' houses;

- reducing the incidence of repetition and dropout;

- improving the subject matter and gender content of the curriculum; and

- improving the efficiency of the primary school system through better utilization of teacher training colleges, primary classrooms and teachers, and through improved procurement procedures.

Although we understand that the final details of the GABLE document and the agreements between our two governments are still being discussed, the Government in consideration of the budget support being provided by USAID is committed to the following as its part of the program:

- the Government will make increased budgetary resources available to education and primary education in particular. Our target of reaching at least 15% of the total recurrent Government budget for education with over 50% of that allocated to primary education by 1995 as stated in the Education for All document remains in effect;

- the Government will direct additional resources to the construction of schoolrooms and teachers' houses with specific targets to be further agreed to with USAID;

- the Government will institute a system of school fee waivers for non-repeating primary school girls to encourage their advancement;

- the Government will review its procurement procedures for purchasing and distributing textbooks and school supplies with a view to making the process competitive to assure lower costs;

- the Government will test the practicality of double shifts in urban primary schools;

- the Government through its facilities at MIE will establish a system to review and modify the primary school curriculum to make it more appropriate for girl students;

- the MOEC will take steps to expand enrollment in teacher training colleges; and

- the MOEC will establish a system to reduce repetition in primary standards.

In support of the activities of the Government identified above, we understand that, in addition to the US$ 14 million budget support, that US$ 6 million million of funding will be reserved for a project element. This project element will provide for technical assistance, commodities, studies to guide Government actions, and implementation of a campaign to encourage girls to remain in school.

The Government looks forward to signing the agreements on GABLE shortly and to collaborating with USAID on this important development effort in primary education.

Yours sincerely,

G. B. Chiwaula
SECRETARY TO THE TREASURY

ANNEX D

ASSESSMENT OF GOVERNMENT OF MALAWI FINANCIAL CONTROLS

SEPTEMBER 30, 1991

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GENERAL ASSESSMENT

Government of Malawi
Budgeting and Accounting System and Procedures

I. GENERAL INFORMATION

The United States Agency for International Development (USAID) is in the process of establishing a program in Malawi focused on improving quality of primary education and increasing girls' attainment in basic education. It will focus on specific elements of that system such as increased share of Government of Malawi (GOM) allocation to primary education, increased number of classrooms and primary teachers, instructional materials, revised curriculum, etc. The GOM and USAID are embarking on a non-project sector assistance approach to implementation and impact accountability. USAID resources in the form of untied budgetary support will be made available to the GOM on a sectoral basis. Projectized resources will finance short-term technical assistance, training, monitoring, evaluation and audit support.

II. THE PLANNING AND BUDGETING SYSTEM IN MALAWI

A. Constitutional Provision

Financial matters are regulated by the Finance and Audit Act (Cap 37:01) which provides for the authorization, control and audit of public finance in Malawi. To this end, the 'Act' provides that all revenues received from any sources should be paid into a Consolidated Fund. This act is also supplemented by Treasury Instructions, Finance and other circulars issued from time to time to regulate financial matters.

B. Program Classification of the Budget

Up to 1986/87 the Budget was prepared on a functional basis with expenditure presented in a few sub-heads. However, since 1987/88 financial year, the budget is classified under Heads/Votes, Programs, Items and Sub-Items. Heads on the development account identify the sectors of development. Heads on the Revenue Account denote Statutory expenditure which is submitted to Parliament for information only. Voted expenditures are allocations on the Revenue Account which Parliament has to approve during its Committee of Supply.

Expenditure on Heads and Votes is divided into programs, items and sub-items. Programs are the main activities of a Ministry or Department. Items identify specific projects or cost centers under each program. Sub-items are types of expenditure and are presented in a line-item format.

C. Financing of Development Expenditure

Resources for Development Account comprise external loans and internal loans raised by the GOM. Under the present classification, Heads represent the type of source of external loans while items identify the donor and the project for which the loan was granted.

D. Deposit Account

Whenever funds are made available to the GOM before expenditure can be incurred, the funds are initially credited to a Deposit Account. After expenditure is incurred, the Accountant General in the Ministry of Finance transfers the account to an appropriate Resources Item.

E. Estimates of Revenue

Estimates of revenue are projections of general revenue collected to fund the Recurrent Budget. The overall responsibility for collection and accounting for government revenues rests with Controlling Officers and designated receivers of revenue as notified by the Treasury from time to time. Controlling Officers may designate officers in their respective ministries who should act as revenue collectors on behalf of the ministry. As we noted above, all revenues are paid into the Consolidated Fund which consists of all revenues and other monies raised or received by the Government of Malawi.

The procedure for preparation of revenue estimates follows the traditional budgeting system whereby types of expenses are listed by category. The Receiver of Revenue depicts the actual collection of the previous years, and using that as a base, the forthcoming year's estimate and a forecast for the next two years is made. The forecast is made by simply allowing annual increments.

While the Budget Officers in the Treasury rely heavily on the Collectors' judgment, if there is a serious gap between the expected revenues and those estimated by the Receivers of Revenue, the Treasury may decide to alter the level of charges. This is done to increase or decrease the revenue to be collected.

The Finance and Audit Act provides that spending ministries can submit supplementary estimates on either Revenue or Development Account to the Treasury whenever a need for more funds arises. Spending ministries are however supposed to present a satisfactory justification for such requests. The Treasury usually meets the requests but eventually the National Assembly will be required to grant retrospective approval. This approval is obtained during Committee of Supply when the first and second Supplementary Estimates are discussed.

Whenever an urgent and unforeseen need for expenditures has arisen for which no other provision exists, the Ministry of Finance can make advances from the Contingencies Fund to meet that need. Therefore, spending ministries do approach the Treasury whenever

they are faced with the above situation. The Treasury issues a Contingencies Advance Warrant authorizing the withdrawal from the Consolidated Fund the amount needed. Eventually Supplementary Estimates are prepared and when approved, the provision is used to refund the Advance.

F. Formulation of the Budget and the Budget Cycle Evolution of Development Policy

Malawi has never published a comprehensive economic plan which would act as a legal basis for executing development policies. However, early in 1970's, the Office of the President and Cabinet published a Statement of Development Policies (DEVPOL) covering the period 1971 to 1980. A second DEVPOL was issued in 1987 for the decade 1987 - 1996.

Both these documents set out in some detail, objectives policies and government budget forecasts using quantified economic analysis as an illustration of possible trends. Although the second DEVPOL is not meant to act as a framework for control and direction, it emphasizes the need to aim at a 4% growth rate per annum to improve the welfare of the population which is growing at 3.2% per year. Among other important recommendations, the Statement of Development policies highlights the need for the geographical balance of economic activity and the eventual elimination of dependence on foreign assistance to cover economic recurrent budget deficits.

(1) The Budget and Financial Year: The government budget is divided into the Recurrent and the Development Accounts. The financial year runs from 1st April to 31st March of the following calendar year.

(2) The Development Budget Cycle: The Department of Economic Planning and Development (EP&D) in the Office of the President and Cabinet (OPC) is responsible for the formulation of a three year rolling Public Sector Investment Program (PSIP).

(3) Call for Development Proposals: In early May, the Department of Economic Planning and Development issues a circular to Controlling Officers and Project Officers to submit development proposals which they would like to undertake in the forthcoming year. These submissions have to reflect new proposals as well as ongoing projects, indicating the total estimated costs; source of funds; duration of project; schedule of expenditure during each year; completion dates; recurrent annual costs of the projects; objectives and targets as well as anticipated benefits. The Controlling Officers submit project proposals in order of priority rating as perceived by the Controlling Officers.

Assisted by Treasury Officials, the Chief Development Officer in EP&D discusses the proposals with individual ministries. The purpose of these meetings is to give Controlling Officers the opportunity to justify the proposals which, given reasonable freedom from financial constraints, they would be able to undertake.

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Treasury and the EP&D officials check whether similar projects are already being considered by a different ministry; whether some of the projects could be combined for effectiveness and efficiency; and, whether the projects are saleable to donors. An analysis of anticipated benefits vis-a-vis costs is undertaken in order to make sure that value for money is realized from proposed investments. In addition to this some external donors also demand the strict appraisal of new projects before they can accept them for funding.

(4) Evaluation of Project Proposals: All project proposals submitted to the Treasury and the EP&D should receive an economic appraisal to assess its costs and benefits. The Chief Economist in EP&D tries to examine every proposal but he/she may select some for detailed economic appraisal.

(5) Preparation of Draft Development Program: The Treasury and the EP&D select projects which should comprise the Development Program. Selection of new projects is limited to essential donor financial projects because of scarcity of funds, balance of payment requirements and recurrent cost implications. The preparation of the budget also takes into consideration the need to achieve a balanced and equitable growth in the economy and the ceilings agreed upon between the Malawi Government and the International Monetary Fund and the World Bank.

The list of selected projects is submitted to the Office of the President and Cabinet for approval. Once the draft is approved, it becomes a Public Sector Investment Program (PSIP). A circular is then issued to Controlling Officers advising them of their allocations which are considered to be maximum.

(6) Revenue Budget Cycle: In September, the Treasury reviews the financial performance of the ministries in order to forecast the costs for the financial year. At the same time, using information from the EP&D and Reserve Bank of Malawi, the most realistic projections for the forthcoming year are also made.

(7) Cabinet Paper: The Treasury prepares a Cabinet paper in which details of preliminary revenue estimates, obtained from the major collectors, are shown. Projected levels of each ministry's expenditure are also proposed including draft policy determinations for the new fiscal year. When the Cabinet has approved the projects, the levels of expenditure projections are known as "Cabinet Ceilings." The ceilings are sent to Controlling Officers in separate letters.

The Revenue Estimates Cycle meets the Development Estimates Cycle when the Treasury calls for revised and draft estimates meetings on both Development and Revenue Accounts. Both accounts are then under the firm control of the Treasury and they are mainly concerned with overall limits and targets agreed upon by the Government and the IMF and World Bank.

(8) Estimates Meetings: Estimates 'hearings' take place in the Treasury between December and January. The exercise culminates in the production, printing and presentation to Parliament of five Budget Documents including the Budget Statement which the Minister of Finance delivers in Parliament on Budget Day in the third week of March.

(9) Appropriation Bills: After the Members of Parliament have discussed the Estimates and passed them through a Committee of the whole House, the Finance Minister introduces Appropriation Bills. When the Bills have been passed, the Minister issues a GENERAL WARRANT and a SPECIAL WARRANT. The general warrant advises the Secretary to the Treasury that expenditures for the forthcoming year may take place on the amounts Voted by Parliament. The Special Warrant is an authority for the current year's supplementary estimates where appropriate.

The Secretary to the Treasury in turn issues a circular to Controlling Officers to start spending subject to the instructions shown in the Estimates Books and spending financial regulations.

(10) "Green" Books: As soon as the development budget is approved, EP&D visits all ministries to discuss and collect up to date project submissions for inclusion in the Development Program Book, known as Green Book because of the color of its covers.

The Development Program Book contains details of the projects for the coming year together with preliminary indications of levels of expenditure for the next four years. These documents are produced to show ministries which they, as a group, are supposed to implement.

Map books are also printed to show locations within Malawi where projects are in progress or planned. These documents are distributed to Project Officers, District Commissioners as well as Donors.

III. BUDGETARY EXECUTION AND CONTROL

A. Introduction

The preparation and approval phases of budgeting are immediately followed by execution and control. As in other countries, the main responsibility for authorizing, controlling and accounting for expenditure falls on the Controlling Officers and their designated officers.

B. Objectives of Budgetary Control

Budgetary Control aims at achieving several objectives depending on circumstances which prevail in various institutions in different countries. In the case of Malawi, there are three main objectives of budgetary control.

(1) Parliamentary Control: The system of financial management in the GOM is designed to ensure control by Parliament over financial operations of government ministries and parastatals. No revenue may be raised or money spent without Parliamentary authority and the government should therefore be accountable to Parliament by submitting Annual Statement of Accounts and the annual report of the Auditor general.

It is important that expenditure conforms to the purpose and financial limits approved by Parliament. Any excessive expenditure is therefore reported to Parliament in the annual report of the Auditor General. Such over expenditures are viewed most seriously by the Public Accounts Committee which is Parliament's watch dog over public finance in Malawi.

(2) Economy, Efficiency and Effectiveness: The second stated objective of budgetary control in the GOM is to ensure that resources are used with regard to economy, efficiency and effectiveness in view of the tight financial situation Malawi is facing.

(3) Variance Analysis: The third objective is to facilitate timely corrective action on any undesirable variances and/or to use the lessons learned from the causes of the variances for future policy formulation.

C. Executive Control Through the Treasury

As a means of exercising control over the budget, the Treasury is entrusted with the implementation of the Finance and Audit Act. Therefore, in coordination with the spending ministries, the Treasury uses a number of instruments to control government expenditures. Some of the instruments are:

(1) Reserve Provisions: Due to the uncertainty of resources for both the Revenue and Development Accounts, some objects of expenditure appearing in the budget may have to be reserved by the Treasury. The Treasury can do this by indicating with note in the Estimate Book. Therefore no expenditure can take place on the reserved items without Treasury approval. If Treasury is satisfied that sufficient funds are available for the reserved item and that the spending ministry is in a position to utilize such funds without unfavorable consequences, the Treasury will dereserve the funds by issuing a numbered Treasury Authority (TA). The Treasury Authority is always copied to the Accountant General and the Auditor General.

(2) Virement Warrant: No expenditure may be undertaken on one sub-item on activities falling under another sub-item. Similarly, the approved provision on any sub-item may not be exceeded unless additional funds have been provided through a Virement Warrant issued by the Treasury.

In this way funds may be vired from one sub-item to another provided the total provision for the Vote, or Head is not exceeded. The Standing Instructions have details on how applications for virement should be submitted.

(3) Establishment: Every position in the GOM was created by an Establishment Warrant issued by the Treasury in consultation with the Department of Personnel Management and Training in the Office of the President and Cabinet. Therefore, any additions, retitling, reductions and regrading of positions can only be effected by either a numbered Establishment Warrant or Treasury Authority.

No provision can be allowed in the Estimates for salary unless it relates to an established position.

(4) Reallocations on Development Account: For externally funded projects, the Treasury can authorize the carry forward of unspent funds provision in the development estimates. The funds do not lapse after 31st March as in locally funded projects.

D. Delegation of Financial Authority to Warrant Holders

Financial Authority in the GOM flows from the National Assembly to the Minister of Finance, from the Minister of Finance to Controlling Officers of the spending ministries and departments.

The Controlling Officers can designate financial authority to the Departmental Officers authorized to incur expenditure who are called Warrant Holders.

E. Procedure for Expenditure Control Under Delegate Authority

The process of expenditure control under this system involves allocation of funds and issues of Departmental Warrants by Controlling Officers. Such funds are issued quarterly and the Warrants authorize the Warrant Holder to incur expenditure on each sub-item within specified limits.

F. System of Internal Checks and Control

Alongside the delegation of authority, procedures have been established to ensure that the authority delegated is correctly exercised at each level. This is done through a system of controls and checks built in the accounting system. Such controls include strict monitoring and checks performed at different stages in processing financial transactions to ensure compliance with regulations, accuracy of accounts, and detection of errors.

G. Expenditure Monitoring

Each Warrant Holder is required to maintain Vote Books and Commitment Registers to record the commitments and payments made against the funds allowed on the Department Warrants. Instructions

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clearly specify that it is the responsibility of the Warrant Holder to ensure that covering funds are available before commitment is made or payment authorized.

H. Monthly Expenditure Monitoring Returns

Warrant Holders are required to submit monthly expenditure returns to their respective headquarters officers where these are reviewed and consolidated for submission to the Treasury by the 15th of every month.

The exercise is meant to enable Controlling Officers to monitor expenditure and commitments incurred by Warrant Holders against authorized funds. The Controlling Officers are supposed to take action by limiting expenditures or by applying for virement of funds from one sub-item to another.

I. Expenditure With Due Regard to Economy, Efficiency, and Effectiveness

Because it is mainly at the Warrant Holders' level that commitment documents are issued and the process of expenditure begins, the financial regulations emphasize the prevention of loss, waste or extravagance in the spending of public funds.

Warrant Holders are supposed to play a major role in controlling expenditure and they are supposed to possess the requisite knowledge and skill to discharge their responsibilities. However, government also provides a system of Internal Audit to facilitate this process.

J. Internal Audit

Internal Audit is a systematic examination of financial records and transactions conducted by a separate section within a Ministry or Department. This section reports to the Under Secretary in the Ministry and its objective is to assist management in improving financial administration.

The Internal Auditor is a member of the Accountant General's Office. Apart from assisting staff of the offices audited in understanding and implementing financial regulations and procedures, he/she is supposed to identify areas of weakness in financial control and bring these to the notice of management and, make suggestions for improvement.

The Internal Auditor does not assume the function of management as he/she has no direct responsibility or authority over the activities of the offices audited. Although he/she does not give instructions to the staff, the Internal Auditor is a very important member in the organization.

K. Expenditure Review Meetings

Controlling Officers are encouraged to hold regular meetings with their Departmental Officers to review expenditure trends and institute corrective measures as appropriate.

L. Establishment of a Strong Monitoring Unit in the Treasury

To control and plan public expenditures effectively, in 1987/88 financial year, the Treasury established a new Section, headed by an Under Secretary, concerned with expenditure monitoring. A new system of cash management was introduced as follows:

(1) Monthly Cash Allocations: As a way of complementing the examination of the monthly expenditure returns submitted by spending ministries, a system of bank accounts have been opened for each ministry at the Reserve Bank of Malawi. Those ministries and departments which were using Treasury Cashier's Offices to process their payments were told to be self accounting and begin to issue their own checks.

Funds are transferred on a monthly basis to each account. The checks may bounce if funds are not available in the account.

If a project is funded from both local and external sources, such a project will have two bank accounts one for each source of funding. If during the month funds are exhausted preventing further payments, spending ministries are required to present a justification to the Treasury for additional funds, on a case by case basis.

The formula for calculating monthly allocation is: Annual provision minus expenditure to date divided by twelve.

(2) Disbursement of Funds by Donors: GOM receives financial aid in the form of grants and loans from donor governments and International Organizations. Disbursement for funded projects is generally made in two ways, direct payment to the suppliers or contractors on the basis of claims certified by project officers and, by reimbursement procedure.

(3) Reimbursement Procedure: In this case, it is normal practice that claims for reimbursement are submitted to the donor after the expenditure on approved projects has been incurred from local resources. Under this procedure, it is imperative that claims are submitted promptly to avoid deobligation of funds by the donors. Some donors impose conditions regarding the amount reimbursable under different categories of project expenditure. If claims are not submitted according to the donor's requirement, donors are likely to reject such claims which forces the country to use expensive short term bridging finance.

M. Procedure for Processing Claims

Spending ministries submit applications to the Treasury for claiming reimbursement from the donors in accordance with the instructions in the donor agreement. The Treasury examines the claims and supporting documents, numbering applications consecutively commencing with number one in each year. The name and address of the payee and bank account number is also indicated on the application.

After the claims have been thoroughly checked, they are endorsed by the authorizing official in the Treasury and submitted to the donor for payment. As of June, 1988, the Claims Section of the Treasury was tracking 237 grants and loan agreements and this involved a significant amount of funds. Occasionally, serious problems have been experienced concerning coordination among the Treasury, spending ministries and the donors.

IV. CONCLUSION

Based on this assessment, USAID/Malawi expresses a high degree of confidence that the GOM's budgeting and financial management systems provide reasonable assurance that funds, both U.S. dollars and local currency, if generated, associated with the U.S. assistance will not be diverted and will be used for intended purposes. This is further supported by the review of GOM Ministry of Agriculture accounting system performed by the Price Waterhouse Associates in July, 1989, and the one performed by the USAID/Malawi Financial Management Office on GOM Ministry of Health's accounting system in November, 1988 with following review in June, 1990. However, no system of accounting and internal control can provide absolute assurance against fraud or defalcation and this conclusion is subject to compliance with the systems and controls in place and vigilance of the GOM and USG audit authorities.

ANNEX E

WAIVER OF DOLLAR TRACKING REQUIREMENTS

SEPTEMBER 30, 1991

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Agency for International Development
Washington, D.C. 20523

Hs. Malawi
Gable 612-0240

ACTION MEMORANDUM TO THE ASSISTANT ADMINISTRATOR FOR AFRICA

FROM: AFR/PD, Timothy Boyle

SUBJECT: Separate Accounts/Dollar Tracking Requirements for Malawi Non-Project Assistance

Problem: To request an exemption to the Separate Account/Dollar Tracking requirements of Section 575 (b)(1) of the Foreign Operations, Export Financing, and Related Programs Appropriations Act, 1991, for the FY 1991 funding tranches for Malawi's two new non-project assistance programs, Agriculture Sector Assistance Program (612-0239) and the Girls' Attainment of Basic Literacy and Education Program (612-0240).

Background: The Agriculture Sector Assistance Program (ASAP) is a six year, $50 million program whose overall goal is "to broaden and equalize access to agricultural resources, thus achieving growth in agricultural productivity, employment, and incomes." ASAP intends to meet this goal by pursuing policy reform in two areas: (1) allowing small scale farmers freedom of choice in production and marketing; and (2) increasing the efficiency and transparency of regulatory and contractual relationships in the agricultural sector. The $10 million set aside for projectized activities will facilitate implementing the policy reform areas mentioned above. Each of the four tranches in the $40 million cash disbursing grant will be disbursed against a specific reform agenda which will extend the benefits of access to high value crop production and marketing to small scale and subsistence farmers. Planned NPA component obligations in the program's first year (FY 1991) amount to $20 million ($5 million from the Mission's OYB and $15 million in AEPRP funds).

Girls' Attainment of Basic Literacy and Education (GABLE) is a new five-year $20 million program. Its goal is to "increase girls' attainment in basic education." GABLE expects to achieve this goal through the policy reforms focussed around: (1) increasing the long term financial resource base and internal efficiency of the education sector; (2) improving the quality of primary education; and (3) improving girls' access to and quality of education. The $6 million set aside for projectized activities will support achieving the policy reform objectives. The $14 million cash disbursing grant is split into three equal tranches that will be disbursed against implementation of a specific reform agenda. The Mission intends to obligate all $14 million of the NPA component in FY 1991.

Discussion: Pursuant to section 575(b)(4) of the Foreign Operations, Export Financing, and Related Program Appropriations Act, 1991, an exemption to the separate account/dollar tracking

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requirements may be granted for cash disbursing, non-project sector assistance programs. The Africa Bureau (90 State 50769), outlined conditions and procedures under which such requests for exemption would be processed. This guidance states that the main criterion is the degree of interference implementing section [575[b]] would have on the host country's foreign exchange allocation system. It states that a waiver will be considered if the prior identification of specific foreign exchange uses and subsequent tracking of dollars interferes with existing policies and procedures that are less restrictive and more supportive of market allocation of foreign exchange.

Last year USAID/Malawi obtained an exemption to the separate account/dollar tracking requirements, based on the Government of Malawi's (GOM) movement towards full liberalization of the foreign exchange allocation system. Imposing separate account/dollar tracking requirements would be more directive of foreign exchange uses than the existing system in Malawi.

This year's request for an exception is based on the GOM's continuing support of an open foreign exchange allocation system.

Description of the System. The process by which a private individual gains access to foreign exchange has not changed in the last year. An importer continues to make application to his commercial bank for an allocation of foreign exchange, and that commercial bank retains the authority to approve or deny the application based on the commercial and financial soundness of the proposed investment or purchase. Upon approval, the individual continues to provide full cover for the transaction, either in cash or credit, and the commercial bank processes the request through the Reserve Bank of Malawi. The Reserve Bank provides the foreign exchange to the commercial bank, which processes a letter of credit or provides the foreign exchange, depending on the transaction. It should be noted that Reserve Bank involvement in the allocation process is not an approval of an application; the commercial bank determines if a request is financially and commercially sound. The short negative list for which government approval of allocations is required now consists of military and hazardous equipment, and a limited number of luxury consumer goods. The role of the Reserve Bank in processing foreign exchange allocations continues to be pro forma; foreign exchange continues to be available on demand for financially sound transactions.

A.I.D. interprets recent private sector debates about the allocation system as further signs of liberalization. For example, one segment of the private sector recently complained openly that it was being denied access to the amount of foreign exchange that it desired. When high shop inventory levels earlier this year prompted commercial banks to cut back approvals for import of consumer goods, many shopkeepers complained of

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(nonexistent) foreign exchange restrictions. Local manufacturers also have complained about foreign competition and argued (unsuccessfully) for restrictions on foreign exchange availability to protect them. This has been particularly pronounced in the case of textiles, where cheap, lower quality cloth from the Far East undercuts domestic fabrics. Before the reforms, inefficient local producers faced little competition. That said, these complaints resulted in a Reserve Bank of Malawi seminar in April 1991 for the commercial banks and private sector which emphasized the approval responsibilities of the commercial banks in the foreign exchange allocation system.

A.I.D. finds it encouraging that these issues were openly debated and, to a large extent, resolved by the market place.

Price of Foreign Exchange: The GOM continues to manage the price of foreign exchange cautiously, and there is no effective parallel market for foreign exchange in the country. The value of the kwacha is pegged to a basket of currencies including U.S. dollars, rand, Zimbabwe dollars, U.K. pounds, marks, French francs, yen and Dutch guilders. After announcing the seven percent devaluation in April 1990, the GOM allowed the Malawi kwacha to appreciate against the then depreciating U.S. dollar for several months. This pattern was not mirrored for the British pound or German mark. For these currencies the kwacha remained stable for part of the year and recorded mild depreciation for the remainder. Since early 1991, however, the kwacha has devalued by over 16 percent with respect to the rising dollar. In a country which manages publicly its exchange rate, this slow devaluation is to be expected. Furthermore, fluctuation is seen as standard operations as evidenced by the fact that there has been no formal devaluation announcement. The devaluation is taking place as a natural consequence of market conditions. The Mission is encouraged by this movement.

Other Issues: In reviewing the Mission's 1990 request for an exemption to separate account requirements, A.I.D./W personnel had raised two additional concerns. The first related to the degree to which the GOM was or might become involved in the allocation decisions of the commercial banks, given the ownership structure of the banks. USAID/Malawi was charged with monitoring allocation decisions closely and Mission monitoring over the past year indicates that the GOM has not sought to direct the commercial banks' decisions. The most striking evidence of this was the Reserve Bank's seminar which reminded the commercial banks of their autonomy in allocating foreign exchange.

The second concern was whether the foreign exchange pricing system in place in Malawi is sufficiently responsive to market forces. Movements over the last year in the price of foreign exchange indicate that the price of foreign exchange is, indeed responsive to market forces. This is underscored by the quiet,

continuous nature by which adjustments have been made. Last year's formal seven percent devaluation against the dollar, announced just after the budget speech, created much furor; this year's de facto 16 percent devaluation has been taken in stride.

Authority: Pursuant to Section 575(b)(4) of the Foreign Operations, Export Financing, and Related Programs Act, 1991, "Non-project sector assistance funds may be exempt from the requirements of subsection (b)(1) only through notification procedures of the Committee on Appropriations." Section 575(b)(1) is that section which requires separate accounts for DA, DFA and ESF-funded cash transfers and non-project assistance programs.

Recommendation: That you approve the language in the Congressional Notifications for both the Agricultural Sector Assistance Program (612-0239) and the Girls' Attainment of Basic Literacy and Education (612-0240) that would exempt funds obligated in FY 1991 for those programs from the provisions of Section 575(b)(1) of the above referenced Act.

Approved: _____

Disapproved: _____

Date: 7-24-91

Attachment:

A. CN for Agricultural Sector Assistance Program
B. CN for Girls' Attainment in Basic Education and Literacy
C. LILONGWE 03274

clearances:

GC/AFR:MAKleinjan MA Kleinjan date 7/17/91
AFR/DP:JGovan _____ date 7-17.
AFR/SA:LADean (draft) date July 17, 1991
AFR/SA:RHarber (draft) date July 12, 1991
AFR/SA/ZZMS:KFinan (cable) date July 5, 1991
AFR/PD/SA:NBillig (draft) date July 9, 1991

drafted by:AFR/PD/SA:AFessenden:USAID/Malawi:RMahoney:11July91:
x78818:U:\AFESSEND\DOCS\MAL$TR.am

AGENCY FOR INTERNATIONAL DEVELOPMENT
ACTIVITY DATA SHEET

COUNTRY: Malawi

1. Girls' Attainment in Basic Literacy and Education (GABLE)	FUNDING SOURCE: DFA	PROPOSED OBLIGATION (In thousands of dollars) FY 91: 20,000	LOP OF PROJECT (Est.): 20,000
AID/W 612-0237/40 GRANT ☐ LOAN ☐	NEW ☐ CONTINUING ☐	PRIOR REFERENCE: None	INITIAL OBLIGATION FY 91 / ESTIMATED FINAL OBLIGATION FY 91 / ESTIMATED COMPLETION DATE OF PROJECT FY 97

CP 81-05 (4-86)

PURPOSE: To increase the number of girls attending primary schools and their attainment while in school.

BACKGROUND: Most girls in Malawi do not attend school. Among those who do, half leave school during the early primary grades before they have had enough education to become fully literate. While boys and girls enter the first year of school in roughly the same numbers, fifty percent more boys than girls reach their final year of primary school. Family obligations, school expense, poor school quality and a dearth of post-primary opportunities discourage girls in particular from remaining in primary school. Large classes with few teachers, and a shortage of classrooms and instructional materials characterize the block environment of the early primary grades and contribute to a low literacy rate of 31% among Malawian women.

PROGRAM DESCRIPTION: The problem of girls' educational attainment is part of a larger problem of resource shortages in the education sector. Through a combination of policy reform and technical assistance, the GABLE program will focus on obtaining a larger share of Government of Malawi (GOM) spending for the education sector, and on using these resources to improve general primary school quality. The bulk of increased expenditures will be for schools construction, teachers salaries, and educational materials. GABLE will encourage girls to attend and complete primary school by reducing the costs of schooling for parents; improving the quality of primary education through decreased class sizes; increasing the supply of learning materials and classrooms; and improving perceptions regarding the importance and benefits of educating girls.

A total of $16 million will be released to the GOM budget in annual tranches for three years. An additional $4 million will be provided in the form of technical assistance for policy reform implementation, including a social marketing campaign to promote girls' education and a feasibility study of community radio channels. No local currency will be generated under the program.

Section 575(b)(4) Exemption Justification: Pursuant to section 75(b)(4) of the Foreign Operations, Export Financing and Related Programs Appropriations Act, A.I.D. requests an exemption for this program from the separate account requirement because the GOM continues to support an open foreign exchange allocation system. The Reserve Bank of Malawi seminar in April 1991 emphasized commercial bank autonomy in allocating foreign exchange. Movements over the last year in the price of foreign exchange indicate that its' price is responsive to market forces. Imposing a separate account and dollar tracking requirements would interfere with this strong movement to an open, non-directive system by reintroducing the GOM as approver or arbiter in the allocation of foreign exchange.

Relationship to A.I.D. Country Strategy: Research has shown that the education of girls is positively correlated with fertility reduction and better child health. Therefore, the GABLE program will directly support USAID/Malawi's Country Program Strategic Plan (CPSP) objectives of reduced population growth and decreased child mortality.

Host Country and Other Donors: The Government of Malawi (GOM), through an Action Plan approved in 1990, has committed itself to major reform of primary education including a social mobilization campaign to encourage girls to stay in school. It is providing local currency, staff, equipment and logistical support for this effort. Local communities in Malawi will pay school fees and assist with construction of classrooms and teachers houses. The World Bank, the largest donor in the sector, is providing credits totalling $44 million to help implement the Plan in the areas of teacher training, renovation and building of schools and teacher housing and provision of text books and other teacher aids. Other donors including UNDP, UNESCO, the Canadian CIDA program, UNICEF and the African Development Fund are also supporting this initiative.

Beneficiaries: Although girls and their families will be the primary beneficiaries, boys who attend school will also benefit from the improved quality of education made possible through GABLE.

Major outputs: GABLE directly supports a larger share of government spending on education and greater efficiency in the education sector. Major outputs are: easier access to primary schools for girls, curriculum development to meet girls' needs, increased school materials, and general improvements in the quality of primary education.

A.I.D. Financed Inputs	Life-of-Project ($000)
Non-Project Assistance	16,000
Technical Support	4,000
TOTAL	20,000

U.S. FINANCING (In thousands of dollars)

	Obligations	Expenditures	Unexpended
Through September 30, 1989	0	0	0
Estimated Prior Year 1990	0	0	SCHEDULED OBLIGATIONS
Estimated through September 30, 1990	0	0	0
		Future Year Obligations	Estimated Total Cost
Proposed Prior Year 1991	20,000	0	20,000

PRINCIPAL CONTRACTORS OR AGENCIES: To be determined

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ANNEX F

ECPR GUIDANCE CABLE

SEPTEMBER 30, 1991

OUTGOING TELEGRAM

AGENCY FOR INT'L DEV.
TELECOMMUNICATIONS CENTER

ORIGIN OFFICE AFPD-04
INFO AFSA-03 AFDP-06 AFCB-02 AFTR-05 AFPE-05 OL-01 SAST-01
PPPB-02 GC-01 GCAF-02 PPEA-01 GCCN-01 VIO-01 AFSP-02
AFFP-02 ES-01 STPO-01 STHR-01 STRS-01 EB-03 SS6-02
AFIS-01 AFEM-01 AMAD-01 LAB-05 AAAF-03
/059 A8 19/1713Z

INFO LOG-00 AF-00 /007A

DRAFTED BY: AID/AFR/PD:MBILLIG:MB
APPROVED BY: AID/DAA/AFR:ELSAIERS
AID/AFR/PD:CROZELL (DRAFT) AID/AFR/SA:AFRIMAN (DRAFT)
AID/AFR/TR/ENR:CBONNER (DRAFT) AID/AFR/PD:TBORK
AID/AFR/DP:JATHERTON (DRAFT) AID/AFR/SA:THARBER (DRAFT)
GC/AFR:MAKLEINJAN PPC/WID:SFUNK (DRAFT)
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R 190744Z APR 91
FM SECSTATE WASHDC
TO AMEMBASSY LILONGWE
INFO RUENHR/AMEMBASSY NAIROBI

UNCLAS STATE 128833

AIDAC NAIROBI FOR REDSO

E.O. 12356: N/A
TAGS:
SUBJECT: MALAWI GIRLS' ATTAINMENT IN BASIC LITERACY AND EDUCATION PROGRAM PAIP/PID REVIEW

1. SUMMARY: THE ECPR MET ON MARCH 22, 1991 TO REVIEW THE SUBJECT PAIP/PID. AFR/PD TIM BORK CHAIRED THE MEETING AND REPRESENTATIVES OF AFR/SA, AFR/PD, GC/AFR, AFR/TR, AFR/DP, PPC/WID, AND S AND T/ED ATTENDED. DEPUTY MISSION DIRECTOR KEN RIKARD AND HRDO JOAN LARCOM REPRESENTED THE MISSION.

THE GABLE PAIP/PID WAS APPROVED SUBJECT TO RECEIPT OF ADDITIONAL MACRO-ECONOMIC INFORMATION. END SUMMARY.

2. AFTER AN EXCELLENT PRESENTATION OF THE MISSION'S RATIONALE FOR THE GABLE PROGRAM BY JOAN LARCOM AND KEN RIKARD, INCLUDING A WELL-RECEIVED VIDEO, THE ECPR DISCUSSED THE FOLLOWING ISSUES:

A. IS THE GOM READY TO MAKE THE BUDGET REALLOCATIONS NECESSARY TO INCREASE FUNDS PROVIDED TO EDUCATION?

DESPITE MALAWI'S ECONOMIC GROWTH RATE OF 4.8 PERCENT IN 1990, WE UNDERSTAND THAT GOM REVENUES ARE NOT EXPECTED TO INCREASE AT A SIMILAR RATE. IF THIS IS TRUE, INCREASED

EXPENDITURES IN EDUCATION WILL REQUIRE THAT OTHER SECTORS OF THE BUDGET BE CUT. WHAT MINISTRIES OR SECTORS WILL BE REDUCED? WILL THE PRINCIPAL SECRETARIES IN CHARGE OF THOSE SECTORS FACING REDUCTIONS LOBBY TO RETAIN PRESENT BUDGET LEVELS? IF THESE SECTORS ARE CUT, WHAT IMPACT WILL SUCH REDUCTIONS HAVE ON THE ECONOMY? INTERTWINED WITH THIS ISSUE IS THE QUESTION OF SUSTAINABILITY. AN INCREASED LEVEL OF EXPENDITURES FOR EDUCATION MUST BE PERMANENT TO ACHIEVE THE PROGRAM'S OBJECTIVES OF INCREASING GIRLS' ATTAINMENT IN BASIC EDUCATION. THE PAIP POINTS OUT THAT THE GOM HAS CONSISTENTLY MISSED TARGETS TO INCREASE AND MAINTAIN SPENDING IN THE SECTOR, AS AGREED WITH THE WORLD BANK. WHAT ARE THE CHANCES THAT OVERALL ECONOMIC GROWTH WILL BE SUFFICIENT TO CREATE CORRESPONDING INCREASES IN GOM REVENUES IN THE LONGER RUN? IS THIS LIKELY? IF GOM REVENUES REMAIN CONSTANT, OTHER SECTORS

MUST SUSTAIN A PERMANENT REDUCTION TO PAY FOR INCREASED EDUCATION. THIS COULD HAVE LONGER RUN IMPLICATIONS FOR OTHER PRIORITY GOM ACTIVITIES; E.G., IF FUNDS ARE TRANSFERRED FROM PUBLIC WORKS ROAD CONSTRUCTION TO EDUCATION, WILL ENOUGH REMAIN TO MAINTAIN AND CONSTRUCT ROADS SUFFICIENT TO SUPPORT PRIVATE SECTOR GROWTH? WE UNDERSTAND SHIFTS CAN BE DONE ON A TEMPORARY BASIS, BUT CAN ROADS OR ANY OTHER DEVELOPMENT SECTOR BE REDUCED PERMANENTLY? IS THE GOM WILLING, AND THE ECONOMY ABLE, TO SUSTAIN A PERMANENT SHIFT IN THE GOM BUDGET?

RECOMMENDATION: PRIOR TO FINAL APPROVAL OF THE PAIP/PID, THE MISSION SHOULD INCLUDE THREE ADDITIONAL ITEMS WITHIN THE MACROECONOMIC BACKGROUND SECTION OF THE PAIP/PID. FIRST, A BREAKDOWN OF THE OVERALL GOM BUDGET BY FUNCTIONAL CLASSIFICATION SHOULD BE INCLUDED. THE PURPOSE OF THIS IS TO PROVIDE AN IDEA OF THE CURRENT RELATIVE SHARES OF EDUCATION AND OTHER SECTORS AND WHAT THE PROPOSED CHANGES IN EDUCATION'S BUDGET SHARE MIGHT ENTAIL. THE DISCUSSION ACCOMPANYING THE TABLE OR CHART SHOULD BRIEFLY IDENTIFY THE LIKELY REDUCTIONS IN ORDER TO ACHIEVE AN INCREASED SHARE FOR EDUCATION AND THE RATIONALE BEHIND THAT SPECIFIC SET OF REDUCTIONS AS OPPOSED TO OTHERS. SECOND, THE MISSION SHOULD PROVIDE A FUNCTIONAL BREAKDOWN OF THE CURRENT EDUCATION BUDGET BY MAJOR CATEGORIES, E.G., TEACHERS, INSTRUCTIONAL MATERIALS, BUILDING MAINTENANCE, ADMINISTRATION, ETC., AND BY EDUCATIONAL LEVEL OF EXPENDITURE, E.G. BETWEEN PRIMARY, SECONDARY AND HIGHER EDUCATION. THE REASON FOR THIS IS TO PROVIDE A FULLER UNDERSTANDING OF THE CURRENT STATUS SO THAT ONE MIGHT BETTER UNDERSTAND THE CONTENT AND MAGNITUDE OF THE

PROPOSED CHANGES UNDER THE PROGRAM. THIS WILL ALSO SERVE AS A BASELINE FOR SUBSEQUENT MONITORING AND EVALUATION.

FINALLY, THE MISSION SHOULD PROVIDE SOME INFORMATION CONCERNING THE RELATIONSHIP BETWEEN APPROVED BUDGETARY LEVELS AND ACTUAL EXPENDITURES WITHIN THE EDUCATION BUDGET ON AS HISTORICAL A BASIS AS POSSIBLE.

B. DOES THE GOM HAVE THE ADMINISTRATIVE, TECHNICAL, AND INSTITUTIONAL CAPACITY TO ADEQUATELY IMPLEMENT THE PROGRAM?

INDEPENDENT OF THE QUESTION OF POLITICAL WILL WITHIN THE GOM TO REDIRECT A SUBSTANTIAL AMOUNT OF RESOURCES TO EDUCATION IS THE QUESTION OF GOM CAPACITY. THE MISSION WILL NEED TO ADDRESS IN CONSIDERABLE DETAIL THE ADMINISTRATIVE, TECHNICAL, AND INSTITUTIONAL CAPACITY ISSUES SURROUNDING BOTH THE PROJECT AND THE NPA ELEMENTS OF THIS PROGRAM.

THE PAIP DID NOT DISCUSS THE ADMINISTRATIVE CAPACITY OF THE MALAWIAN INSTITUTIONS IMPLEMENTING THE PROJECT PORTION OF THE PROGRAM. WHAT UNIT WITHIN THE MOEC WILL ADMINISTER THE TOTAL PROGRAM? DO THEY HAVE TRAINED MANAGERS? IS ADDITIONAL TRAINING REQUIRED?

RECOMMENDATION: THE PAAD SHOULD INCLUDE AN IN-DEPTH ANALYSIS OF THE ADMINISTRATIVE, TECHNICAL AND INSTITUTIONAL CAPACITIES OF THE HOST COUNTRY ENTITIES CHARGED WITH IMPLEMENTING THE PROGRAM. ANY WEAKNESSES SHOULD BE IDENTIFIED, AND REMEDIES INCLUDED WITH THE

PROGRAM DESIGN.

C. SHOULD THE MISSION INCLUDE THE RADIO SCHOOL PROJECT AS PART OF THE PROGRAM?

SOME COMMITTEE MEMBERS THOUGHT THAT THE RADIO PROJECT

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SHOULD BE ELIMINATED FROM THE PROJECT. THE PROGRAM CONTAINS SO MANY ACTIVITIES THAT THE ACTIVITY RAISES DOUBTS ABOUT IMPACT CONCENTRATION AND THE MISSION'S MANAGEMENT CAPACITY. THUS, ELIMINATING THE RADIO PILOT WOULD SHARPEN THE PROGRAM'S FOCUS AND INCREASE THE IMPACT OF THE REMAINING ACTIVITIES. IN ADDITION, PREVIOUS RADIO PROJECTS IN MALAWI HAVE NOT PROVEN SUCCESSFUL. FINALLY, THERE WAS SOME FEAR THAT THE RADIO SUBPROJECT MIGHT DETER PARENTS FROM SENDING GIRLS TO FORMAL SCHOOLS.

IN SUPPORT OF THE ACTIVITY, JOAN LARCOM EXPLAINED THAT THE NON-FORMAL RADIO EDUCATION PROGRAM COULD REACH A LARGE NUMBER OF CHILDREN WHO ARE NORMALLY OUTSIDE THE FORMAL EDUCATION SYSTEM SINCE HALF OF MALAWIAN CHILDREN DON'T

ATTEND ANY SCHOOL. IT COULD ALSO PREPARE GIRLS TO ENTER PRIMARY SCHOOL AT THE APPROPRIATE AGE, AND ENCOURAGE SCHOOL ATTENDANCE. BECAUSE THE RADIO PROGRAM WOULD BE LINKED TO WRITTEN MATERIALS ONLY PROVIDED TO VILLAGES WITHOUT SCHOOLS, IT WOULD NOT DETER SCHOOL ATTENDANCE.

RECOMMENDATION: THAT THIS ACTIVITY BE EXAMINED PRIOR TO THE PREPARATION OF THE PAAD TO ENSURE THAT IT NEITHER STRAINS THE MISSION'S IMPLEMENTATION CAPACITY NOR SERVES AS A DISINCENTIVE TO THE FORMAL SCHOOL PROGRAM. IF THE

PILOT STUDY GOES FORWARD, IT SHOULD INCLUDE AN EXAMINATION OF INSTITUTIONAL AND INFRASTRUCTURAL COSTS AND OTHER BARRIERS TO EFFECTIVE EDUCATION SERVICE DELIVERY.

3. DESIGN GUIDANCE - THE ECPR AGREED THAT THE POLICY FRAMEWORK MATRIX OUTLINED IN THE PAIP WOULD BE EXPANDED PRIOR TO PAAD AUTHORIZATION TO INCLUDE TARGETS ESTABLISHED FOR THE OVERALL PROGRAM. ASSUMPTIONS, TIMING, AND THOSE RESPONSIBLE FOR ACHIEVING TARGETS, WOULD BE DISCUSSED. THE POLICY MATRIX ALSO WOULD INCLUDE THOSE ITEMS IN THE POLICY DIALOGUE WHICH WOULD CONTRIBUTE TO INCREASING GIRLS' ATTAINMENT IN BASIC EDUCATION, E.G., AREAS OF CONDITIONALITY AND SPECIFIC CONDITIONS OF DISBURSEMENT FOR THE FIRST ONE-TWO YEARS OF THE PROGRAM. FURTHER, THE MATRIX MUST GO BEYOND CONDITIONALITY TO DISCUSS THE OVERALL IMPACT OF THE PROGRAM. TO GIVE THE MISSION AN EXAMPLE OF THE TYPE OF EXPANDED POLICY MATRIX WANTED, WE ARE TELEFAXING TO JOAN LARCOM A COPY OF THE RECENTLY COMPLETED NAMIBIA POLICY MATRIX FOR IMPROVING BASIC EDUCATION. IT IS THIS KIND OF ROAD MAP THAT IS REQUIRED IF FLEXIBILITY IN IMPLEMENTATION IS TO BE GRANTED. PRIOR TO AUTHORIZING THE PAAD THE MISSION SHOULD SUBMIT FOR AID/W REVIEW THE EXPANDED POLICY MATRIX. PRIOR TO INITIAL OBLIGATION (OR AUTHORIZATION, AT MISSION DISCRETION) A LETTER OF INTENT (L.O.I.) FROM THE GOVERNMENT OF MALAWI WHICH CLEARLY OUTLINES GOM OBJECTIVES IN THE SECTOR AND THE STEPS IT INTENDS TO TAKE TO ACHIEVE THOSE OBJECTIVES SHOULD BE RECEIVED, REVIEWED, AND APPROVED BY THE MISSION. AID/W WILL WANT THE OPPORTUNITY TO REVIEW THIS L.O.I. INFORMALLY. CLEARLY, A HIGH DEGREE OF CONGRUENCE BETWEEN THE L.O.I. AND THE POLICY MATRIX WILL BE FUNDAMENTAL TO

A.I.D.'S ABILITY TO AUTHORIZE THIS PROGRAM.

4. CONCERNS

THE FOLLOWING CONCERNS WERE DISCUSSED AT THE ECPR.

A ARE THE MISSION'S ASSUMPTIONS CORRECT REGARDING PARENTS' PERCEIVED CONSTRAINTS TO SENDING GIRLS TO SCHOOL?

THE PAIP ASSERTS THAT TUITION COSTS WERE A PRIMARY DETERRENT TO GIRLS' GOING TO SCHOOL. REVIEWERS EXPRESSED CONCERN THAT OTHER COSTS OF ATTENDING SCHOOL MAY BE MORE

IMPORTANT DETERRENTS THAN TUITION. THUS, ELIMINATING TUITION WOULD NOT ENABLE GIRLS TO ATTEND SCHOOL IN THOSE FAMILIES IN WHICH THE COST OF UNIFORMS, OR THE OPPORTUNITY COST OF A GIRL'S LABOR, WAS EVEN MORE IMPORTANT THAN TUITION.

RECOMMENDATION: THE MISSION SHOULD ADDRESS THIS CONCERN DURING PAAD DESIGN AS PART OF THE ANALYSIS REQUIRED TO PLAN THE RESEARCH AGENDA FOR IMPLEMENTATION. IN ADDITION, DURING IMPLEMENTATION THE GABLE'S RESEARCH COMPONENT WILL INCLUDE ONGOING ANALYSIS OF THE OPPORTUNITY COST OF GIRLS' LABOR AND THE PERCEIVED VALUE OF GIRLS' EDUCATION TO THE RURAL FAMILY. A SECOND STUDY SHOULD EVALUATE THE EFFECT ON PERSISTENCE IN PRIMARY SCHOOL OF THE PROPOSED POLICY TO MAKE RELATIVELY MORE SECONDARY SCHOOL PLACES AVAILABLE TO GIRLS, GIVEN THAT THERE IS FAIRLY LOW OPPORTUNITY FOR GAINFUL FORMAL SECTOR EMPLOYMENT IN MALAWI FOR SECONDARY SCHOOL LEAVERS. STUDY RESULTS MAY CAUSE THE MISSION TO REASSESS ITS APPROACH TO TUITION COSTS AND TO SOCIAL

MOBILIZATION EFFORTS TO INCREASE THE NUMBER OF GIRLS ATTENDING SCHOOL.

B. HAVE ALL NECESSARY POLICY REFORMS BEEN EXAMINED AND PRIORITIZED?

IN ADDITION TO THE PROBLEM OF EIGHTH GRADE REPEATERS, SOME OF THE CLASSROOM CROWDING AT LOWER LEVELS IS CAUSED BY REPETITION. NO MENTION IS MADE OF LIMITING THE LOWER LEVEL REPEATERS TO FREE UP SPACE.

RECOMMENDATION: THE MISSION SHOULD EXAMINE THE NUMBER OF REPEATERS AT LOWER GRADES. IF SIGNIFICANT QUOTE ACADEMIC TRIAGE UNQUOTE SHOULD BE PART OF THE MISSION'S POLICY DIALOGUE, NOT ONLY AT THE ENTRANCE TO SECONDARY SCHOOL, BUT AT THE LOWER GRADE LEVELS AS WELL. ADDITIONALLY, WHILE THE PAIP REFERS TO A NUMBER OF CONSTRAINTS TO ATTAINMENT OF GIRLS' EDUCATION, THE PAAD SHOULD CLEARLY LIST AND RANK ORDER THE MOST IMPORTANT CONSTRAINTS IN THE CHOSEN SECTOR.

C. DOLLAR DISBURSEMENT AND LOCAL CURRENCY MECHANISMS - WHILE THE PAIP PROPOSES REQUESTING AN EXEMPTION FROM THE DOLLAR SEPARATE ACCOUNT REQUIREMENT THROUGH THE CH MECHANISM, THE MISSION SHOULD REQUEST IT AT AN EARLY ENOUGH POINT SO AS TO ALLOW ALTERNATE PLANS IN CASE IT IS DENIED. MISSION SHOULD PREPARE AN ACTION MEMORANDUM

(SIMILAR TO THE MED MEMO LAST SUMMER) WHICH JUSTIFIES THE EXEMPTION, SINCE THIS WAS NOT INCLUDED IN THE PAIP. AFR/SA WILL PROCESS THE MEMO THROUGH DAA/AFR.

WHETHER THERE WILL BE A LOCAL CURRENCY TO MANAGE UNDER THE PROGRAM DEPENDS UPON THE DISPOSITION OF THE DOLLARS AND THE MISSION'S REASONS FOR HAVING A SEPARATE LOCAL CURRENCY ACCOUNT, AND THE PAAD SHOULD REFLECT THIS. UNDER SECTION 575 (A) OF THE FY 1991 FOREIGN ASSISTANCE APPROPRIATIONS ACT, CASH DISBURSEMENTS, AS A GENERAL MATTER, DO NOT REQUIRE LOCAL CURRENCY DEPOSITS IF THE DOLLAR USE DOES NOT RESULT IN A QUOTE GENERATION UNQUOTE. THE DOLLAR USE WOULD NOT RESULT IN A QUOTE GENERATION UNQUOTE IF THE DOLLAR SEPARATE ACCOUNT EXEMPTION IS APPROVED OR IF THE DOLLARS ARE TRACKED TO DEBT. LIKEWISE, A QUOTE GENERATION UNQUOTE WOULD OCCUR IF THE DOLLARS ARE TRACKED TO PRIVATE SECTOR IMPORTS. WHERE THE DOLLAR USE DOES NOT REQUIRE A LOCAL CURRENCY DEPOSIT, SECTION 575 (A) DOES NOT PROHIBIT THE MISSION'S ELECTING TO REQUIRE ONE.

THE EXISTING JULY 1988 DFA NPA GUIDANCE, HOWEVER, ASSUMES

THAT OFA NPA PROGRAMS WILL INCLUDE LOCAL CURRENCY, USED IN SUPPORT OF THE SECTOR PROGRAM'S OBJECTIVES, ABSENT EXCEPTIONAL CIRCUMSTANCES, DEFINED IN TERMS OF THE PARTICULAR PROGRAM. THIS IS TO HELP ESTABLISH THE SECTOR, AS OPPOSED TO BALANCE-OFPAYMENTS, NATURE OF THE ASSISTANCE. IF THE MISSION BELIEVES THAT THE DOLLAR USES WILL NOT RESULT IN A GENERATION, THAT THE CONDITIONALITY FOR THE DOLLAR DISBURSEMENTS IS SO STRONG THAT THERE IS NO NEED FOR LOCAL CURRENCY TO ESTABLISH THE SECTOR NATURE OF THE PROGRAM, AND IF THERE ARE OTHER EXTRAORDINARY CIRCUMSTANCES IN TERMS OF GABLE, IT MAY WANT TO RECONSIDER WHETHER A LOCAL CURRENCY DEPOSIT, OR A 100 PER CENT LOCAL CURRENCY DEPOSIT, IS NECESSARY.

THE PAIP ALSO DECLARES THAT LOCAL CURRENCY UNDER THE PROGRAM WILL BE MANAGED IN ACCORDANCE WITH STANDARD MISSION PROCEDURES, WHICH PROVIDE FOR ALLOCATING THE LOCAL CURRENCY TO AGREED-UPON GOH BUDGET LINE ITEMS, RATHER THAN SPECIFIC ACTIVITIES. UNDER EXISTING AGENCY LOCAL CURRENCY GUIDANCE, THIS REQUIRES THAT THE MISSION, INTER ALIA, ASSURE THAT THE HOST GOVERNMENT HAS ACCORDED APPROPRIATE EMPHASIS TO AGREED-UPON PRIORITIES WITHIN THE BUDGET LINE ITEM. HOWEVER, THE ECPR EXPRESSED CONCERN THAT IN DESCRIBING THE SPECIFIC LOCAL-CURRENCY ACTIVITIES UNDER THE PROGRAM, PARTICULARLY FOR SCHOOL CONSTRUCTION, THE MISSION WAS INTENDING TO HOLD ITSELF TO MUCH MORE SPECIFIC RESULTS FROM THE LOCAL CURRENCY COMPONENT. FOR INSTANCE, THE PAAD SHOULD NOT HOLD THE MISSION TO COUNTING SPECIFIC

NUMBERS OF CLASSROOMS OR ASSURING THAT PRECISE DESIGN REQUIREMENTS WERE CONSISTENTLY APPLIED. IN SHORT, MISSION LC STRATEGY WILL REQUIRE CAREFUL RECONSIDERATION DURING FINAL DESIGN.

D. DOES THE MISSION HAVE SUFFICIENT STAFF TO IMPLEMENT THE PROGRAM?

SEVERAL MEMBERS COMMENTED ON THE LARGE NUMBER OF SEPARATE ACTIVITIES THE PROGRAM CONTAINED AND THE RESULTING BURDEN TO ALREADY OVERWORKED MISSION STAFF.

RECOMMENDATION: THE MISSION SHOULD SELECT MANAGEMENT MODES WHICH REDUCE THE NEED FOR DAY TO DAY MISSION INVOLVEMENT IN THE PROGRAM. DIRECT MANAGEMENT OF STAFF

INTENSIVE ACTIVITIES SUCH AS PROCUREMENT AND PARTICIPANT TRAINING SHOULD BE AVOIDED.

E. THE ECPR NOTED THAT THE SUBJECT PAIP DID NOT ADDRESS THE POTENTIAL FOR UTILIZING DISADVANTAGED ENTERPRISES (PREVIOUSLY REFERRED TO AS GRAY AMENDMENT ENTITIES) IN THE DESIGN AND/OR IMPLEMENTATION OF THIS ACTIVITY.

RECOMMENDATION: BECAUSE THE PROGRAM PROPOSED INCLUDES THE PROCUREMENT OF SHORTTERM TECHNICAL ASSISTANCE AND COMMODITIES, THE PAAD SHOULD DISCUSS THE EXTENT TO WHICH DISADVANTAGED ENTERPRISES HAVE BEEN CONSIDERED AND WILL BE INVOLVED IN THE IMPLEMENTATION OF THIS ACTIVITY. THERE ARE DISADVANTAGED ENTERPRISES THAT HAVE IQCS AS WELL AS BUY-IN CONTRACTS THAT CAN PROVIDE SOME, IF NOT ALL, OF THE SERVICES PROPOSED AND THE ECPR ENCOURAGES THEIR USE.

F. THE PAIP STATES (P. 31) THAT THE PROJECT ASSISTANCE COMPONENT MIGHT FUND MINISTRY OF COMMUNITY SERVICES SALARIES FOR THE SOCIAL MOBILIZATION CAMPAIGN. THIS ITEM SHOULD BE REVIEWED TO ENSURE THAT IT DOES NOT CONSTITUTE A SALARY SUPPLEMENT, OR THAT IF IT DOES, IT COMPLIES WITH AGENCY GUIDANCE THEREON.

6. RESULTS OF THE IEE REVIEW WILL BE SENT SEPTEL.

5. SUGGESTIONS FOR PREPARING THE ECONOMIC ANALYSIS FOR THE PAAD HAVE BEEN PROVIDED BY AFR/SA VIA TELEFAX.

6. THE SUBJECT PAIP/PID IS APPROVED SUBJECT TO RECEIPT BY AFR/SA OF AN ACCEPTABLE MACRO-ECONOMIC FRAMEWORK PER

PARAGRAPH 2. A, ABOVE. THIS DOCUMENTATION WILL BE APPROVED BY SEPARATE CABLE. WHEN THIS APPROVAL IS RECEIVED, MISSION MAY EXERCISE ITS DOA 551 AUTHORITY TO

APPROVE THE PAAD. KINNITT

ANNEX G

STATUTORY CHECKLIST

SEPTEMBER 30, 1991

5C(2) - ASSISTANCE CHECKLIST

Listed below are statutory criteria applicable to the assistance resources themselves, rather than to the eligibility of a country to receive assistance. This section is divided into three parts. Part A includes criteria applicable to both Development Assistance and Economic Support Fund resources. Part B includes criteria applicable only to Development Assistance resources. Part C includes criteria applicable only to Economic Support Funds.

CROSS REFERENCE: IS COUNTRY CHECKLIST UP TO DATE? Yes.

A. CRITERIA APPLICABLE TO BOTH DEVELOPMENT ASSISTANCE AND ECONOMIC SUPPORT FUNDS

1. **Host Country Development Efforts** (FAA Sec. 601(a)): Information and conclusions on whether assistance will encourage efforts of the country to: (a) increase the flow of international trade; (b) foster private initiative and competition; (c) encourage development and use of cooperatives, credit unions, and savings and loan associations; (d) discourage monopolistic practices; (e) improve technical efficiency of industry, agriculture, and commerce; and (f) strengthen free labor unions.

Assistance will discourage monopolistic practices by requiring competition for procurement and distribution of school materials.

2. **U.S. Private Trade and Investment** (FAA Sec. 601(b)): Information and conclusions on how assistance will encourage U.S. private trade and investment abroad and encourage private U.S. participation in foreign assistance programs (including use of private trade channels and the services of U.S. private enterprise).

Technical assistance will be contracted from U.S. sources.

3. Congressional Notification

a. General requirement (FY 1991 Appropriations Act Secs. 523 and 591; FAA Sec. 634A): If money is to be obligated for an activity not previously justified to Congress, or for an amount in excess of amount previously justified to Congress, has Congress been properly notified (unless the notification requirement has been waived because of substantial risk to human health or welfare)? **CN cleared on 27 August 1991.**

b. **Notice of new account obligation** (FY 1991 Appropriations Act Sec. 514): If funds are being obligated under an appropriation account to which they were not appropriated, has the President consulted with and provided a written justification to the House and Senate Appropriations Committees and has such obligation been subject to regular notification procedures? **N/A**

c. **Cash transfers and nonproject sector assistance** (FY 1991 Appropriations Act Sec. 575(b)(3)): If funds are to be made available in the form of cash transfer or nonproject sector assistance, has the Congressional notice included a detailed description of how the funds will be used, with a discussion of U.S. interests to be served and a description of any economic poolicy reforms to be promoted? **Yes.**

4. **Engineering and Financial Plans** (FAA Sec. 611(a)): Prior to an obligation in excess of $500,000, will there be: (a) engineering, financial or other plans necessary to carry out the assistance; and (b) a reasonably firm estimate of the cost to the U.S. of the assistance? **Yes.**

5. **Legislative Action** (FAA Sec. 611(a)(2)): If legislative action is required within recipient country with respect to an obligation in excess of $500,000, what is the basis for a reasonable expectation that such action **N/A**

will be completed in time to permit orderly accomplishment of the purpose of the assistance?

6. **Water Resources** (FAA Sec. 611(b); FY 1991 Appropriations Act Sec. 501): If project is for water or water-related land resource construction, have benefits and costs been computed to the extent practicable in accordance with the principles, standards, and procedures established pursuant to the Water Resources Planning Act (42 U.S.C. 1962, et seq.)? (See A.I.D. Handbook 3 for guidelines.)

N/A

7. **Cash Transfer and Sector Assistance** (FY 1991 Appropriations Act Sec. 575(b)): Will cash transfer or nonproject sector assistance be maintained in a separate account and not commingled with other funds (unless such requirements are waived by Congressional notice for nonproject sector assistance)?

Separate account and dollar tracking requirements were waived by the AA/AFR on 7/24/91 and the CN requested an exemption from the separate account requirement.

8. **Capital Assistance** (FAA Sec. 611(e)): If project is capital assistance (e.g., construction), and total U.S. assistance for it will exceed $1 million, has Mission Director certified and Regional Assistant Administrator taken into consideration the country's capability to maintain and utilize the project effectively?

N/A

9. **Multiple Country Objectives** (FAA Sec. 601(a)): Information and conclusions on whether projects will encourage efforts of the country to: (a) increase the flow of international trade; (b) foster private initiative and competition; (c) encourage development and use of cooperatives, credit unions, and savings and loan associations; (d) discourage monopolistic practices; (e) improve technical efficiency of industry, agriculture and commerce; and (f) strengthen free labor unions.

See A.1 above.

10. **U.S. Private Trade** (FAA Sec. 601(b)): Information and conclusions on how project will encourage U.S. private trade and investment abroad and encourage private U.S. participation in foreign assistance programs (including use of private trade channels and the services of U.S. private enterprise).

See A.2 above.

11. **Local Currencies**

a. **Recipient Contributions** (FAA Secs. 612(b), 636(h)): Describe steps taken to assure that, to the maximum extent possible, the country is contributing local currencies to meet the cost of contractual and other services, and foreign currencies owned by the U.S. are utilized in lieu of dollars.

The host country will contribute a minimum of 25% of overall program costs. No project related foreign currencies are owned by the U.S.

b. **U.S.-Owned Currency** (FAA Sec. 612(d)): Does the U.S. own excess foreign currency of the country and, if so, what arrangements have been made for its release?

No.

c. **Separate Account** (FY 1991 Appropriations Act Sec. 575). If assistance is furnished to a foreign government under arrangements which result in the generation of local currencies:

N/A

(1) Has A.I.D. (a) required that local currencies be deposited in a separate account established by the recipient government, (b) entered into an agreement with that government providing the amount of local currencies to be generated and the terms and conditions under which the currencies so deposited may be utilized, and (c) established by agreement the responsibilities of A.I.D. and that government to monitor and account for deposits into and disbursements from the separate account?

(2) Will such local currencies, or an equivalent amount of local currencies, be used only to carry out the purposes of the DA or ESF chapters of the FAA (depending on which chapter is the source of the assistance) or for the administrative requirements of the United States Government?

(3) Has A.I.D. taken all appropriate steps to ensure that the equivalent of local currencies disbursed from the separate account are used for the agreed purposes?

(4) If assistance is terminated to a country, will any unencumbered balances of funds remaining in a separate account be disposed of for purposes agreed to by the recipient government and the United States Government?

12. Trade Restrictions

a. Surplus Commodities (FY 1991 Appropriations Act Sec. 521(a)): If assistance is for the production of any commodity for export, is the commodity likely to be in surplus on world markets at the time the resulting productive capacity becomes operative, and is such assistance likely to cause substantial injury to U.S. producers of the same, similar or competing commodity? N/A

b. Textiles (Lautenberg Amendment) (FY 1991 Appropriations Act Sec. 521(c)): Will the assistance (except for programs in Caribbean Basin Initiative countries under U.S. Tariff Schedule "Section 807," which allows reduced tariffs on articles assembled abroad from U.S.-made components) be used directly to procure feasibility studies, prefeasibility studies, or project profiles of potential investment in, or to assist the establishment of facilities specifically designed for, the manufacture for export to the United States or to third country markets in direct competition with U.S. exports, of No.

textiles, apparel, footwear, handbags, flat goods (such as wallets or coin purses worn on the person), work gloves or leather wearing apparel?

13. **Tropical Forests** (FY 1991 Appropriations Act Sec. 533(c)(3)): Will funds be used for any program, project or activity which would (a) result in any significant loss of tropical forests, or (b) involve industrial timber extraction in primary tropical forest areas?

No.

14. **PVO Assistance**

a. **Auditing and registration** (FY 1991 Appropriations Act Sec. 537): If assistance is being made available to a PVO, has that organization provided upon timely request any document, file, or record necessary to the auditing requirements of A.I.D., and is the PVO registered with A.I.D.?

Yes, in the event PVOs are utilized.

b. **Funding sources** (FY 1991 Appropriations Act, Title II, under heading "Private and Voluntary Organizations"): If assistance is to be made to a United States PVO (other than a cooperative development organization), does it obtain at least 20 percent of its total annual funding for international activities from sources other than the United States Government?

Yes. As above.

15. **Project Agreement Documentation** (State Authorization Sec. 139 (as interpreted by conference report)): Has confirmation of the date of signing of the project agreement, including the amount involved, been cabled to State L/T and A.I.D. LEG within 60 days of the agreement's entry into force with respect to the United States, and has the full text of the agreement been pouched to those same offices? (See Handbook 3, Appendix 6G for agreements covered by this provision).

This action will be taken subsequent to signing of the agreement.

16. **Metric System** (Omnibus Trade and Competitiveness Act of 1988 Sec. 5164, as interpreted by conference report, amending Metric Conversion Act of 1975 Sec. 2, and as implemented through A.I.D. policy): Does the assistance activity use the metric system of measurement in its procurements, grants, and other business-related activities, except to the extent that such use is impractical or is likely to cause significant inefficiencies or loss of markets to United States firms? Are bulk purchases usually to be made in metric, and are components, subassemblies, and semi-fabricated materials to be specified in metric units when economically available and technically adequate? Will A.I.D. specifications use metric units of measure from the earliest programmatic stages, and from the earliest documentation of the assistance processes (for example, project papers) involving quantifiable measurements (length, area, volume, capacity, mass and weight), through the implementation stage?	Yes.
17. **Women in Development** (FY 1991 Appropriations Act, Title II, under heading "Women in Development"): Will assistance be designed so that the percentage of women participants will be demonstrably increased?	Yes.
18. **Regional and Multilateral Assistance** (FAA Sec. 209): Is assistance more efficiently and effectively provided through regional or multilateral organizations? If so, why is assistance not so provided? Information and conclusions on whether assistance will encourage developing countries to cooperate in regional development programs.	This program is more suitably implemented by A.I.D. although complementary assistance to the education sector is provided by the World Bank.

19. **Abortions** (FY 1991 Appropriations Act, Title II, under heading "Population, DA," and Sec. 525):

a. Will assistance be made available to any organization or program which, as determined by the President, supports or participates in the management of a program of coercive abortion or involuntary sterilization? — No.

b. Will any funds be used to lobby for abortion? — No.

20. **Cooperatives** (FAA Sec. 111): Will assistance help develop cooperatives, especially by technical assistance, to assist rural and urban poor to help themselves toward a better life? — No.

21. **U.S.-Owned Foreign Currencies**

a. Use of currencies (FAA Secs. 612(b), 636(h); FY 1991 Appropriations Act Secs. 507, 509): Describe steps taken to assure that, to the maximum extent possible, foreign currencies owned by the U.S. are utilized in lieu of dollars to meet the cost of contractual and other services. — N/A

b. Release of currencies (FAA Sec. 612(d)): Does the U.S. own excess foreign currency of the country and, if so, what arrangements have been made for its release? — No.

22. **Procurement**

a. Small business (FAA Sec. 602(a)): Are there arrangements to permit U.S. small business to participate equitably in the furnishing of commodities and services financed? — Yes. Commodities will likely be procured through PSA mechanism which involves small businesses.

b. U.S. procurement (FAA Sec. 604(a)): Will all procurement be from the U.S. except as otherwise determined by the President or determined under delegation from him? — DFA procurement regulations will be followed.

c. Marine insurance (FAA Sec. 604(d)): If the cooperating country discriminates against marine insurance companies authorized to do business in the U.S., will commodities be insured in the United States against marine risk with such a company? N/A

d. Non-U.S. agricultural procurement (FAA Sec. 604(e)): If non-U.S. procurement of agricultural commodity or product thereof is to be financed, is there provision against such procurement when the domestic price of such commodity is less than parity? (Exception where commodity financed could not reasonably be procured in U.S.) N/A

e. Construction or engineering services (FAA Sec. 604(g)): Will construction or engineering services be procured from firms of advanced developing countries which are otherwise eligible under Code 941 and which have attained a competitive capability in international markets in one of these areas? (Exception for those countries which receive direct economic assistance under the FAA and permit United States firms to compete for construction or engineering services financed from assistance programs of these countries.) N/A

f. Cargo preference shipping (FAA Sec. 603)): Is the shipping excluded from compliance with the requirement in section 901(b) of the Merchant Marine Act of 1936, as amended, that at least 50 percent of the gross tonnage of commodities (computed separately for dry bulk carriers, dry cargo liners, and tankers) financed shall be transported on privately owned U.S. flag commercial vessels to the extent such vessels are available at fair and reasonable rates? DFA procurement regulations will be followed.

g. Technical assistance (FAA Sec. 621(a)): If technical assistance is financed, will such assistance be furnished by private enterprise on a contract basis to the fullest extent practicable? Will the Yes.

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facilities and resources of other Federal agencies be utilized, when they are particularly suitable, not competitive with private enterprise, and made available without undue interference with domestic programs?

h. U.S. air carriers (International Air Transportation Fair Competitive Practices Act, 1974): If air transportation of persons or property is financed on grant basis, will U.S. carriers be used to the extent such service is available? Yes.

i. Termination for convenience of U.S. Government (FY 1991 Appropriations Act Sec. 504): If the U.S. Government is a party to a contract for procurement, does the contract contain a provision authorizing termination of such contract for the convenience of the United States? Yes.

j. Consulting services (FY 1991 Appropriations Act Sec. 524): If assistance is for consulting service through procurement contract pursuant to 5 U.S.C. 3109, are contract expenditures a matter of public record and available for public inspection (unless otherwise provided by law or Executive order)? Yes.

k. Metric conversion (Omnibus Trade and Competitiveness Act of 1988, as interpreted by conference report, amending Metric Conversion Act of 1975 Sec. 2, and as implemented through A.I.D. policy): Does the assistance program use the metric system of measurement in its procurements, grants, and other business-related activities, except to the extent that such use is impractical or is likely to cause significant inefficiencies or loss of markets to United States firms? Are bulk purchases usually to be made in metric, and are components, subassemblies, and semi-fabricated materials to be specified in metric units when economically available and technically adequate? Will A.I.D. specifications use metric units of measure from the earliest programmatic stages, and from the earliest Yes.

documentation of the assistance processes (for example, project papers) involving quantifiable measurements (length, area, volume, capacity, mass and weight), through the implemantation stage?

1. Competitive Selection Procedures (FAA Sec. 601(e)): Will the assistance utilize competitive selection procedures for the awarding of contracts, except where applicable procurement rules allow otherwise? Yes.

23. Construction

a. Capital project (FAA Sec. 601(d)): If capital (e.g., construction) project, will U.S. engineering and professional services be used? N/A

b. Construction contract (FAA Sec. 611(c)): If contracts for construction are to be financed, will they be let on a competitive basis to maximum extent practicable? N/A

c. Large projects, Congressional approval (FAA Sec. 620(k)): If for construction of productive enterprise, will aggregate value of assistance to be furnished by the U.S. not exceed $100 million (except for productive enterprises in Egypt that were described in the Congressional Presentation), or does assistance have the express approval of Congress? N/A

24. U.S. Audit Rights (FAA Sec. 301(d)): If fund is established solely by U.S. contributions and administered by an international organization, does Comptroller General have audit rights? N/A

25. Communist Assistance (FAA Sec. 620(h). Do arrangements exist to insure that United States foreign aid is not used in a manner which, contrary to the best interests of the United States, promotes or assists the foreign aid projects or activities of the Communist-bloc countries? Yes.

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26. **Narcotics**

a. **Cash reimbursements** (FAA Sec. 483): Will arrangements preclude use of financing to make reimbursements, in the form of cash payments, to persons whose illicit drug crops are eradicated? — Yes.

b. **Assistance to narcotics traffickers** (FAA Sec. 487): Will arrangements take "all reasonable steps" to preclude use of financing to or through individuals or entities which we know or have reason to believe have either: (1) been convicted of a violation of any law or regulation of the United States or a foreign country relating to narcotics (or other controlled substances); or (2) been an illicit trafficker in, or otherwise involved in the illicit trafficking of, any such controlled substance? — Yes.

27. **Expropriation and Land Reform** (FAA Sec. 620(g)): Will assistance preclude use of financing to compensate owners for expropriated or nationalized property, except to compensate foreign nationals in accordance with a land reform program certified by the President? — Yes.

28. **Police and Prisons** (FAA Sec. 660): Will assistance preclude use of financing to provide training, advice, or any financial support for police, prisons, or other law enforcement forces, except for narcotics programs? — Yes.

29. **CIA Activities** (FAA Sec. 662): Will assistance preclude use of financing for CIA activities? — Yes.

30. **Motor Vehicles** (FAA Sec. 636(i)): Will assistance preclude use of financing for purchase, sale, long-term lease, exchange or guaranty of the sale of motor vehicles manufactured outside U.S., unless a waiver is obtained? — DFA procurement regulations will be followed.

31. **Military Personnel** (FY 1991 Appropriations Act Sec. 503): Will assistance preclude use of financing to pay pensions, annuities, retirement pay, or adjusted service compensation for prior or current military personnel? Yes.

32. **Payment of U.N. Assessments** (FY 1991 Appropriations Act Sec. 505): Will assistance preclude use of financing to pay U.N. assessments, arrearages or dues? Yes.

33. **Multilateral Organization Lending** (FY 1991 Appropriations Act Sec. 506): Will assistance preclude use of financing to carry out provisions of FAA section 209(d) (transfer of FAA funds to multilateral organizations for lending)? Yes.

34. **Export of Nuclear Resources** (FY 1991 Appropriations Act Sec. 510): Will assistance preclude use of financing to finance the export of nuclear equipment, fuel, or technology? Yes.

35. **Repression of Population** (FY 1991 Appropriations Act Sec. 511): Will assistance preclude use of financing for the purpose of aiding the efforts of the government of such country to repress the legitimate rights of the population of such country contrary to the Universal Declaration of Human Rights? Yes.

36. **Publicity or Propoganda** (FY 1991 Appropriations Act Sec. 516): Will assistance be used for publicity or propaganda purposes designed to support or defeat legislation pending before Congress, to influence in any way the outcome of a political election in the United States, or for any publicity or propaganda purposes not authorized by Congress? No.

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37. **Marine Insurance** (FY 1991 Appropriations Act Sec. 563): Will any A.I.D. contract and solicitation, and subcontract entered into under such contract, include a clause requiring that U.S. marine insurance companies have a fair opportunity to bid for marine insurance when such insurance is necessary or appropriate? Yes.

38. **Exchange for Prohibited Act** (FY 1991 Appropriations Act Sec. 569): Will any assistance be provided to any foreign government (including any instrumentality or agency thereof), foreign person, or United States person in exchange for that foreign government or person undertaking any action which is, if carried out by the United States Government, a United States official or employee, expressly prohibited by a provision of United States law? No.

B. CRITERIA APPLICABLE TO DEVELOPMENT ASSISTANCE ONLY

1. **Agricultural Exports (Bumpers Amendment)** (FY 1991 Appropriations Act Sec. 521(b), as interpreted by conference report for original enactment): If assistance is for agricultural development activities (specifically, any testing or breeding feasibility study, variety improvement or introduction, consultancy, publication, conference, or training), are such activities: (1) specifically and principally designed to increase agricultural exports by the host country to a country other than the United States, where the export would lead to direct competition in that third country with exports of a similar commodity grown or produced in the United States, and can the activities reasonably be expected to cause substantial injury to U.S. exporters of a similar agricultural commodity; or (2) in support of research that is intended primarily to benefit U.S. producers? N/A

2. **Tied Aid Credits** (FY 1991 Appropriations Act, Title II, under heading "Economic Support Fund"): Will DA funds be used for tied aid credits?	No.
3. **Appropriate Technology** (FAA Sec. 107): Is special emphasis placed on use of appropriate technology (defined as relatively smaller, cost-saving, labor-using technologies that are generally most appropriate for the small farms, small businesses, and small incomes of the poor)?	N/A
4. **Indigenous Needs and Resources** (FAA Sec. 281(b)): Describe extent to which the activity recognizes the particular needs, desires, and capacities of the people of the country; utilizes the country's intellectual resources to encourage institutional development; and supports civic education and training in skills required for effective participation in governmental and political processes essential to self-government.	This primary education program will be carried out by the host country utilizing local institutions and individuals.
5. **Economic Development** (FAA Sec. 101(a)): Does the activity give reasonable promise of contributing to the development of economic resources, or to the increase of productive capacities and self-sustaining economic growth?	Yes.
6. **Special Development Emphases** (FAA Secs. 102(b), 113, 281(a)): Describe extent to which activity will: (a) effectively involve the poor in development by extending access to economy at local level, increasing labor-intensive production and the use of appropriate technology, dispersing investment from cities to small towns and rural areas, and insuring wide participation of the poor in the benefits of development on a sustained basis, using appropriate U.S. institutions; (b) encourage democratic private and local governmental institutions; (c) support the self-help efforts of developing countries; (d) promote the participation of women in the national economies of developing countries	The program is designed to improve quality and increase efficiency in the delivery of primary education to Malawian children, the vast majority of whom come from poor families. The attainment of girls is emphasized.

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and the improvement of women's status; and (e) utilize and encourage regional cooperation by developing countries.

7. **Recipient Country Contribution** (FAA Secs. 110, 124(d)): Will the recipient country provide at least 25 percent of the costs of the program, project, or activity with respect to which the assistance is to be furnished (or is the latter cost-sharing requirement being waived for a "relatively least developed" country)? Yes.

8. **Benefit to Poor Majority** (FAA Sec. 128(b)): If the activity attempts to increase the institutional capabilities of private organizations or the government of the country, or if it attempts to stimulate scientific and technological research, has it been designed and will it be monitored to ensure that the ultimate beneficiaries are the poor majority? Yes. See B.6 above.

9. **Abortions** (FAA Sec. 104(f); FY 1991 Appropriations Act, Title II, under heading "Population, DA," and Sec. 535):

a. Are any of the funds to be used for the performance of abortions as a method of family planning or to motivate or coerce any person to practice abortions? No.

b. Are any of the funds to be used to pay for the performance of involuntary sterilization as a method of family planning or to coerce or provide any financial incentive to any person to undergo sterilizations? No.

c. Are any of the funds to be made available to any organization or program which, as determined by the President, supports or participates in the management of a program of coercive abortion or involuntary sterilization? No.

d. Will funds be made available only to voluntary family planning projects which offer, either directly or through referral to, or information about access to, a broad range of family planning methods and services? No.

e. In awarding grants for natural family planning, will any applicant be discriminated against because of such applicant's religious or conscientious commitment to offer only natural family planning? No.

f. Are any of the funds to be used to pay for any biomedical research which relates, in whole or in part, to methods of, or the performance of, abortions or involuntary sterilization as a means of family planning? No.

g. Are any of the funds to be made available to any organization if the President certifies that the use of these funds by such organization would violate any of the above provisions related to abortions and involuntary sterilization? No.

10. Contract Awards (FAA Sec. 601(e)): Will the project utilize competitive selection procedures for the awarding of contracts, except where applicable procurement rules allow otherwise? Yes.

11. Disadvantaged Enterprises (FY 1991 Appropriations Act Sec. 567): What portion of the funds will be available only for activities of economically and socially disadvantaged enterprises, historically black colleges and universities, colleges and universities having a student body in which more than 40 percent of the students are Hispanic Americans, and private and voluntary organizations which are controlled by individuals who are black Americans, Hispanic Americans, or Native Americans, or who are economically or socially disadvantaged (including women)? None.

12. Biological Diversity (FAA Sec. 119(g): Will the assistance: (a) support training and education efforts which improve the capacity of recipient countries to prevent loss of biological diversity; (b) be provided under a long-term agreement in which the recipient country agrees to protect ecosystems or other wildlife habitats; (c) support efforts to identify and survey ecosystems in recipient countries worthy of protection; or (d) by any direct or indirect means significantly degrade national parks or similar protected areas or introduce exotic plants or animals into such areas? N/A

13. Tropical Forests (FAA Sec. 118; FY 1991 Appropriations Act Sec. 533(c)-(e) & (g)):

a. A.I.D. Regulation 16: Does the assistance comply with the environmental procedures set forth in A.I.D. Regulation 16? Yes.

b. Conservation: Does the assistance place a high priority on conservation and sustainable management of tropical forests? Specifically, does the assistance, to the fullest extent feasible: (1) stress the importance of conserving and sustainably managing forest resources; (2) support activities which offer employment and income alternatives to those who otherwise would cause destruction and loss of forests, and help countries identify and implement alternatives to colonizing forested areas; (3) support training programs, educational efforts, and the establishment or strengthening of institutions to improve forest management; (4) help end destructive slash-and-burn agriculture by supporting stable and productive farming practices; (5) help conserve forests which have not yet been degraded by helping to increase production on lands already cleared or degraded; (6) conserve forested watersheds and rehabilitate those which have been deforested; (7) support training, research, and other actions N/A

which lead to sustainable and more environmentally sound practices for timber harvesting, removal, and processing; (8) support research to expand knowledge of tropical forests and identify alternatives which will prevent forest destruction, loss, or degradation; (9) conserve biological diversity in forest areas by supporting efforts to identify, establish, and maintain a representative network of protected tropical forest ecosystems on a worldwide basis, by making the establishment of protected areas a condition of support for activities involving forest clearance or degradation, and by helping to identify tropical forest ecosystems and species in need of protection and establish and maintain appropriate protected areas; (10) seek to increase the awareness of U.S. Government agencies and other donors of the immediate and long-term value of tropical forests; (11) utilize the resources and abilities of all relevant U.S. government agencies; (12) be based upon careful analysis of the alternatives available to achieve the best sustainable use of the land; and (13) take full account of the environmental impacts of the proposed activities on biological diversity?

c. Forest degradation: Will assistance be used for: (1) the procurement or use of logging equipment, unless an environmental assessment indicates that all timber harvesting operations involved will be conducted in an environmentally sound manner and that the proposed activity will produce positive economic benefits and sustainable forest management systems; (2) actions which will significantly degrade national parks or similar protected areas which contain tropical forests, or introduce exotic plants or animals into such areas; (3) activities which would result in the conversion of forest lands to the rearing of livestock; (4) the construction, upgrading, or maintenance of roads (including temporary haul roads for logging or other extractive industries) which pass through relatively undergraded

N/A

forest lands; (5) the colonization of forest lands; or (6) the construction of dams or other water control structures which flood relatively undergraded forest lands, unless with respect to each such activity an environmental assessment indicates that the activity will contribute significantly and directly to improving the livelihood of the rural poor and will be conducted in an environmentally sound manner which supports sustainable development?

d. **Sustainable forestry:** If assistance relates to tropical forests, will project assist countries in developing a systematic analysis of the appropriate use of their total tropical forest resources, with the goal of developing a national program for sustainable forestry? — N/A

e. **Environmental impact statements:** Will funds be made available in accordance with provisions of FAA Section 117(c) and applicable A.I.D. regulations requiring an environmental impact statement for activities significantly affecting the environment? — Yes.

14. **Energy** (FY 1991 Appropriations Act Sec. 533(c)): If assistance relates to energy, will such assistance focus on: (a) end-use energy efficiency, least-cost energy planning, and renewable energy resources, and (b) the key countries where assistance would have the greatest impact on reducing emissions from greenhouse gases? — N/A

15. **Sub-Saharan Africa Assistance** (FY 1991 Appropriations Act Sec. 562, adding a new FAA chapter 10 (FAA Sec. 496)): If assistance will come from the Sub-Saharan Africa DA account, is it: (a) to be used to help the poor majority in Sub-Saharan Africa through a process of long-term development and economic growth that is equitable, participatory, environmentally sustainable, and self-reliant; (b) to be used to promote sustained economic growth, encourage

Assistance will (a) support primary education for students from poor families; (b) encourage the government to rely more on the private sector in the procurement and distribution of school materials (c)(d) involve and monitor local perspectives regarding education for girls.

private sector development, promote individual initiatives, and help to reduce the role of central governments in areas more appropriate for the private sector; (c) to be provided in a manner that takes into account, during the planning process, the local-level perspectives of the rural and urban poor, including women, through close consultation with African, United States and other PVOs that have demonstrated effectiveness in the promotion of local grassroots activities on behalf of long-term development in Sub-Saharan Africa; (d) to be implemented in a manner that requires local people, including women, to be closely consulted and involved, if the assistance has a local focus; (e) being used primarily to promote reform of critical sectoral economic policies, or to support the critical sector priorities of agricultural production and natural resources, health, voluntary family planning services, education, and income generating opportunities; and (f) to be provided in a manner that, if policy reforms are to be effected, contains provisions to protect vulnerable groups and the environment from possible negative consequences of the reforms?

16. Debt-for-Nature Exchange (FAA Sec. 463): If project will finance a debt-for-nature exchange, describe how the exchange will support protection of: (a) the world's oceans and atmosphere, (b) animal and plant species, and (c) parks and reserves; or describe how the exchange will promote: (d) natural resource management, (e) local conservation programs, (f) conservation training programs, (g) public commitment to conservation, (h) land and ecosystem management, and (i) regenerative approaches in farming, forestry, fishing, and watershed management. N/A

17. Deobligation/Reobligation (FY 1991 Appropriations Act Sec. 515): If deob/reob authority is sought to be exercised in the provision of DA assistance, are the funds being obligated for the same general purpose, and for countries within the same region as originally obligated, and have the House and Senate Appropriations Committees been properly notified? N/A

18. Loans

a. Repayment capacity (FAA Sec. 122(b)): Information and conclusion on capacity of the country to repay the loan at a reasonable rate of interest. N/A

b. Long-range plans (FAA Sec. 122(b)): Does the activity give reasonable promise of assisting long-range plans and programs designed to develop economic resources and increase productive capacities?

c. Interest rate (FAA Sec. 122(b)): If development loan is repayable in dollars, is interest rate at least 2 percent per annum during a grace period which is not to exceed ten years, and at least 3 percent per annum thereafter?

d. Exports to United States (FAA Sec. 620(d)): If assistance is for any productive enterprise which will compete with U.S. enterprises, is there an agreement by the recipient country to prevent export to the U.S. of more than 20 percent of the enterprise's annual production during the life of the loan, or has the requirement to enter into such an agreement been waived by the President because of a national security interest?

19. Development Objectives (FAA Secs. 102(a), 111, 113, 281(a)): Extent to which activity will: (1) effectively involve the poor in development, by expanding access to economy at local level, increasing labor-intensive production and the use of appropriate technology, spreading investment out from

cities to small towns and rural areas, and insuring wide participation of the poor in the benefits of development on a sustained basis, using the appropriate U.S. institutions; (2) help develop cooperatives, especially by technical assistance, to assist rural and urban poor to help themselves toward better life, and otherwise encourage democratic private and local governmental institutions; (3) support the self-help efforts of developing countries; (4) promote the participation of women in the national economies of developing countries and the improvement of women's status; and (5) utilize and encourage regional cooperation by developing countries?

20. Agriculture, Rural Development and Nutrition, and Agricultural Research (FAA Secs. 103 and 103A):

a. Rural poor and small farmers: If assistance is being made available for agriculture, rural development or nutrition, describe extent to which activity is specifically designed to increase productivity and income of rural poor; or if assistance is being made available for agricultural research, has account been taken of the needs of small farmers, and extensive use of field testing to adapt basic research to local conditions shall be made. N/A

b. Nutrition: Describe extent to which assistance is used in coordination with efforts carried out under FAA Section 104 (Population and Health) to help improve nutrition of the people of developing countries through encouragement of increased production of crops with greater nutritional value; improvement of planning, research, and education with respect to nutrition, particularly with reference to improvement and expanded use of indigenously produced foodstuffs; and the undertaking of pilot or demonstration programs explicitly addressing the problem of malnutrition of poor and vulnerable people.

c. Food security: Describe extent to which activity increases national food security by improving food policies and management and by strengthening national food reserves, with particular concern for the needs of the poor, through measures encouraging domestic production, building national food reserves, expanding available storage facilities, reducing post harvest food losses, and improving food distribution.

21. Population and Health (FAA Secs. 104(b) and (c)): If assistance is being made available for population or health activities, describe extent to which activity emphasizes low-cost, integrated delivery systems for health, nutrition and family planning for the poorest people, with particular attention to the needs of mothers and young children, using paramedical and auxiliary medical personnel, clinics and health posts, commercial distribution systems, and other modes of community outreach.

N/A

22. Education and Human Resources Development (FAA Sec. 105): If assistance is being made available for education, public administration, or human resource development, describe (a) extent to which activity strengthens nonformal education, makes formal education more relevant, especially for rural families and urban poor, and strengthens management capability of institutions enabling the poor to participate in development; and (b) extent to which assistance provides advanced education and training of people of developing countries in such disciplines as are required for planning and implementation of public and private development activities.

Assistance will conduct a feasibility study of radio education for rural families.

23. Energy, Private Voluntary Organizations, and Selected Development Activities (FAA Sec. 106): If assistance is being made available for energy, private voluntary organizations, and selected development problems, describe extent to which activity is:

a. concerned with data collection and analysis, the training of skilled personnel, research on and development of suitable energy sources, and pilot projects to test new methods of energy production; and facilitative of research on and development and use of small-scale, decentralized, renewable energy sources for rural areas, emphasizing development of energy resources which are environmentally acceptable and require minimum capital investment; N/A

b. concerned with technical cooperation and development, especially with U.S. private and voluntary, or regional and international development, organizations; N/A

c. research into, and evaluation of, economic development processes and techniques; N/A

d. reconstruction after natural or manmade disaster and programs of disaster preparedness; N/A

e. for special development problems, and to enable proper utilization of infrastructure and related projects funded with earlier U.S. assistance; N/A

f. for urban development, especially small, labor-intensive enterprises, marketing systems for small producers, and financial or other institutions to help urban poor participate in economic and social development. N/A

C. CRITERIA APPLICABLE TO ECONOMIC SUPPORT FUNDS ONLY

1. **Economic and Political Stability** (FAA Sec. 531(a)): Will this assistance promote economic and political stability? To the maximum extent feasible, is this assistance consistent with the policy directions, purposes, and programs of Part I of the FAA?

2. **Military Purposes** (FAA Sec. 531(e)): Will this assistance be used for military or paramilitary purposes?

3. **Commodity Grants/Separate Accounts** (FAA Sec. 609): If commodities are to be granted so that sale proceeds will accrue to the recipient country, have Special Account (counterpart) arrangements been made? (For FY 1991, this provision is superseded by the separate account requirements of FY 1991 Appropriations Act Sec. 575(a), see Sec. 575(a)(5).) N/A

4. **Generation and Use of Local Currencies** (FAA Sec. 531(d)): Will ESF funds made available for commodity import programs or other program assistance be used to generate local currencies? If so, will at least 50 percent of such local currencies be available to support activities consistent with the objectives of FAA sections 103 through 106? (For FY 1991, this provision is superseded by the separate account requirements of FY 1991 Appropriations Act Sec. 575(a), see Sec. 575(a)(5).)

5. **Cash Transfer Requirements** (FY 1991 Appropriations Act, Title II, under heading "Economic Support Fund," and Sec. 575(b)). If assistance is in the form of a cash transfer:

a. **Separate account:** Are all such cash payments to be maintained by the country in a separate account and not to be commingled with any other funds?

b. Local currencies: Will all local currencies that may be generated with funds provided as a cash transfer to such a country also be deposited in a special account, and has A.I.D. entered into an agreement with that government setting forth the amount of the local currencies to be generated, the terms and conditions under which they are to be used, and the responsibilities of A.I.D. and that government to monitor and account for deposits and disbursements?

c. U.S. Government use of local currencies: Will all such local currencies also be used in accordance with FAA Section 609, which requires such local currencies to be made available to the U.S. government as the U.S. determines necessary for the requirements of the U.S. Government, and which requires the remainder to be used for programs agreed to by the U.S. Government to carry out the purposes for which new funds authorized by the FAA would themselves be available?

d. Congressional notice: Has Congress received prior notification providing in detail how the funds will be used, including the U.S. interests that will be served by the assistance, and, as appropriate, the economic policy reforms that will be promoted by the cash transfer assistance?

DRAFTER:GC/LP:EHonnold:5/17/91:2169J

PD-ABE-734

GIRLS' ATTAINMENT IN BASIC LITERACY AND EDUCATION (GABLE)

VOLUME III: ANNEXES:
BACKGROUND AND ANALYTICAL STUDIES

NPA Number: 612-0240

Project Number: 612-0237

USAID/MALAWI

September 1991

MALAWI
GIRLS' ATTAINMENT IN BASIC LITERACY AND EDUCATION
(GABLE)

612-0237 PA 612-0240 NPA

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ECONOMIC ANALYSIS

SEPTEMBER 30, 1991

ECONOMIC ANALYSIS

Executive Summary

The analytical basis the economic analysis of the GABLE program is a model of the dynamics of Malawi's education system which projects primary education enrollments using expected population growth and key variables influencing the primary education sub- sector. These enrollment projections form the basis for estimating the need for teachers, classrooms, textbooks, and other supplies. The relevant dynamic linkages with teacher production and physical plant and materials depreciation are also included in the model. Outputs of the model include the effects of the proposed policy changes and the "quality," efficiency, and access to primary education, estimates of budgetary requirements for the education sector and primary education sub-sector, estimated effects of GABLE on Malawi's long-run population growth rate, and a cost-benefit analysis of the program.

The estimated effects of GABLE on a variety of "quality" indicators for primary education is to increase a "quality" index (which includes the student/teacher ratio, the student/classroom ratio and the availability of textbooks) relative to the effects of a policy approach attempting to maintain the current primary education situation. This relative increase in the "quality" index equals approximately 35 percent for the year 2000. One of the key conclusions which comes from this analysis is that the production and availability of teachers is the binding constraint for future improvements of Malawi's primary education system.

One of the major expected effects of the GABLE supported policy changes is to significantly reduce the repetition and drop-out rates at all levels of the primary education system. The results of these changes is an improvement in the sub-sector's efficiency as indicated by the expected reduction in the time and cost required to produce a graduate of both standards four and eight. As early as 1996 these efficiency improvements become evident. The time needed to complete standard four falls from 12.7 student-years in the absence of the reforms to 11.8 student- years with the reforms (a seven percent reduction), while the time needed to complete standard eight is reduced from 29.6 student-years to 27.8 student-years (a six percent reduction). By 2005, the time to produce a standard four graduate is reduced by 16.7 percent with the reforms compared to the no reform scenario, while a 24.3 percent reduction is expected for standard eight graduates. These efficiency improvements in terms of the time required to complete standards four and eight are also reflected in the costs to produce graduates. By 1996, the cost to complete standard four is reduced by 5.6 percent, while the cost to complete standard eight is reduced by a little more than five percent. By 2005 these cost reductions are expected to increase to 11.8 percent and 19.6 percent, respectively.

In terms of overall and female access to primary education, the increased enrollment rates for females, along with the reduced drop-out rates, resulting from the GABLE specific policy changes results in an increase of roughly eight percentage points in the total enrollment rate compared to the case with no reforms. The resulting total enrollment rate of roughly 53 percent in 2005 remains significantly below the overall goal of 75 percent set by the Government of Malawi.

Overall female participation in primary education is significantly increased under the GABLE program. By 1996, the proportion of females in all primary standards is expected to increase from 45.4 percent without the reforms to 47.4 percent with the reforms. This increase is expected to continue through the later years reaching almost 50 percent by the year 2005, compared to 45.4 percent without the reforms.

The basic conclusion of the analysis of budgetary requirements for the education sector is that roughly 19 percent of total budgetary expenditures are required by the education sector. In addition, roughly 63 percent of these resources need to be allocated to primary education. While the projections of budgetary needs indicate a decline in resource requirements beginning in 1997, this decline is generated by the shortage of teachers resulting from Malawi's inadequate teacher production capacity and the desired increase in enrollments. Thus, if the GOM's stated objectives are to be met and additional teachers are available, the above estimates of budgetary requirements would continue to be valid.

The conceptual principle underlying the analysis of the impacts of the GABLE program on Malawi's population growth rate is that as females achieve higher levels of education their basic fertility rates tend to decline. In addition, better child care practices are adopted so that child survival rates improve. Combining these factors results in a change in the basic long- run population growth rate associated with higher levels of educational attainment. Thus, as the educational profile of the female population changes the long-run population growth rate also changes. The analysis is based on the projection of the educational profile of Malawi's female population of child- bearing age. This profile is then used to form a weighted average of the expected long-run growth rates implied by the different levels of educational attainment.

This approach probably overestimates the general reduction in the long-run population growth rate since an immediate movement to the long-run growth rate is assumed, rather than a phased movement into the long-run growth rates. While this approach does not provide a fully accurate description of the resulting population growth rates, it does provide a general indication of the likely effects of improved female educational attainment on Malawi's long-run population growth rates. One final caveat is in order. The interaction between improved female education and the effectiveness of general family planning programs is not explicitly considered in this analysis. Thus, there may be externality effects from GABLE on the variety of family planning activities presently operating or being designed in Malawi.

The observed effects of GABLE on the long-run population growth rate through 2015 are minimal. Without any change in the educational system (status quo scenario), Malawi's long-run growth rate would be expected to decline from an estimated level of 4.01 percent per annum in 1989 to 3.94 percent by 2015. With the increased enrollments desired under the EFA objectives, but without the effects of the GABLE reforms, this long-run population growth rate is expected to decline by an additional 0.03 percentage points to 3.91 percent by 2015. When the effects of the GABLE reforms are included, i.e., the further increase in enrollment and the improved throughput of students, the long-run population growth rate is expected decline a further 0.02 percentage points to 3.89 percent by 2015.

Thus, the cumulative effect of the changes in the primary education sub-sector under the EFA and GABLE is to reduce the long-run population growth rate 24 years in the future by 0.05 percentage points. Effectively, this increases the doubling time for the population from 18.3 years to 18.5 years, a gain of 2.4 months.

The final component of this analysis is the actual cost-benefit analysis of the GABLE activity in accordance with the current Africa Bureau guidance for the analysis of Non-Project Assistance (NPA) activities.

GABLE's costs are composed of the following three items:

(1) The opportunity costs of the NPA funds disbursed, converted into local currency at the appropriate shadow exchange rate;
(2) The Project Assistance (PA) expenditures converted into local currency at the appropriate shadow exchange rate; and
(3) The increased GOM budgetary costs for primary education resulting from the GABLE sponsored reforms.

The increased budgetary costs are given by the difference between the primary education expenditures required under Scenario 2 (EFA Objectives Without GABLE Reforms) and those required under Scenario 3 (EFA Objectives With GABLE Reforms). The general approach used to estimate the value of the benefits of the GABLE reforms is to examine the efficiency gains (cost- savings) resulting from the implementation of those reforms. The analysis is complicated by the fact that due to the effects of the GABLE reforms, the primary education system carries a larger student load with the reforms than without. To account for this load discrepancy, the estimation of the benefits is based on what the unreformed system would have cost if it had to produce the same number of graduates as the reformed system. Thus, the benefit stream is given by the difference between the product of the number of graduates produced by the reformed system and the cost of producing a graduate for the unreformed and reformed primary education systems. The economic justification for GABLE is based on the benefit stream estimated for standard eight graduates.

In addition, the possible cost-savings for child health care and primary education resulting from the reduction in the long-run population growth rates across these two scenarios are also examined.

The discounted net-benefit stream based on the cost-savings from standard eight graduates results in cumulative discounted net-benefits that are positive beginning with 1993 and increase to a value of K119 million by the year 2006. The cumulative discounted benefit-cost ratio rises from 2.03 for the period 1992 through 1997, to 2.06 for the period 1992 through 2001, and increases further to 2.20 for the period 1992 through 2006. These cumulative discounted benefit-cost ratios imply that the discounted benefits are more than twice the discounted costs over this time period.

The main factor which generates these cost-savings is the expected immediate implementation of the 75/20/5 admission policy for secondary schools (form one). The effect of this policy is an immediate reduction in the volume of repeaters in standard eight which generates an estimated increase in standard eight completers of approximately 9,500 students compared to the no reform scenario. Thus, the base on which the cost-savings are calculated (the number of standard eight leavers with the GABLE reforms) immediately creates a large estimated cost-savings.

The effects of GABLE on population growth actually increase social service costs since there is a slight increase (negative reduction) in the population growth rate over the period 1994 through 2001. While this effect begins to reverse in 2003, the timing of these changes and the fact that absolute per student primary education costs increase with the effects of GABLE, GABLE results in increased costs for future health and education services. These increased costs, however, are not sufficient to eliminate the cumulative net-benefits from the cost-savings of producing standard eight graduates.

I. Introduction

This Attachment examines the economic implications of the GABLE Program. This analysis is divided into six major sections following this introduction. Section II provides a general description of the analytical approach and model. Section III completes the description of the analytical approach by specifying and defining the details of the various scenarios used in the analysis. Section IV begins the discussion of the expected results of the GABLE program by examining the implications for a variety of summary measures dealing the primary education sub-sector. Section V continues the discussion of the expected results by examining the implications for the Malawi Government's (GOM) budgetary allocations to the education sector and the primary education sub-sector. Section VI examines the expected effects of GABLE on the long-term population growth rate. Finally, Section VII presents the actual cost-benefit analysis for the activity.

II. General Description of the Analytical Approach

The underlying analytical approach for this analysis is a model of the dynamics of Malawi's education system**1.See Annex 1 of this attachment for a detailed discussion and explanation of the analytical model.*. Primary education enrollments are projected, by standard and gender, based on expected population growth, enrollment rates for standard one, and standard specific repetition and drop-out rates. These enrollment projections, along with targets for student/teacher and student/classroom ratios determine the demand for teachers and classrooms. Likewise, enrollments and desired textbooks/student and supplies/student ratios determines the demand for textbooks and learning materials and supplies. The model also incorporates the structure and dynamics of the production of primary teachers. In addition, the dynamics of teacher attrition, classroom depreciation, and textbook depreciation are incorporated.

The above factors are combined with unit cost data for producing teachers, classrooms, textbooks, learning materials, and other primary education costs in order to generate projections of the budgetary requirements for the primary education sub-sector. Budgetary requirements for secondary and tertiary education, as well as education expenditures which cannot be attributed to any of these sub-sectors, are projected by assuming a constant per capita expenditure for these sub-sectors, i.e., budgetary levels grow at the population growth rate. Combining these three sub- sectors, along with the projected levels of unattributable education budgetary expenditures results in a projection of the overall budgetary requirements for the education sector.

Consistency with the macroeconomic framework, and thus future sustainability, is maintained through the projection of total GOM expenditures. This projection is based on an assumed GOM expenditure/GDP ratio of 26 percent (from the World Bank) and an expected real GDP growth rate of 4.5 percent per annum (also from the World Bank) for each of the projection years. Given the expected constancy of Budgetary Revenues (excluding grants) at 20 percent of GDP, this implies a long-term budgetary deficit (excluding grants) of 6% of GDP. World Bank and IMF officials view this as a sustainable level for Malawi given the expectations of continued donor support.

III. Definition of Scenarios

A. General Considerations

The general approach used in the analysis is to examine the implications of three educational scenarios for each of two sets of population growth scenarios. Thus, a total of six scenarios are used in the analysis. For each population/education scenario two basic sets of information are generated. These materials examine the implications of each scenario for a number of summary indicators for the primary education sub-sector. These summary measures include Quality Indicators (student/teacher, student/classroom, and

texts/student ratios), Efficiency Indicators (time to complete standards 4 and 8, cost to complete standards 4 and 8), Female Access Indicators (female enrollment as a percent of total enrollment), and the Total Primary Education Enrollment Rate. In addition, projections of the education sector's budgetary requirements and the relative distribution of those expenditures across the various educational sub-sectors are also examined.

Finally, for each population growth scenario, further implications of the GABLE activity on future long-term population growth rates and the cost-benefit relationships for GABLE are examined.

1. Population Growth Scenarios

Two population growth scenarios are examined**2.These population scenarios are based on information in World Bank, Malawi Population Sector Study (Draft), April 27, 1990.*. These scenarios are summarized in Table E.1 below. The first scenario assumes that current fertility and family planning practices continue unchanged. Given the structure of Malawi's population, this implies that the population growth rate would increase from roughly 3.4 percent per annum for the period 1990/95 to 3.8 percent per annum by 2015/20. The second scenario assumes that the current efforts to promote family planning have some effect on Malawi's population growth rate so that rather than increasing, the population growth rate is maintained constant at 3.4 percent per annum.

TABLE E.1. Population Scenarios Used in the Analysis (Annual Percentage Rates)

Period	Scenario #1 High Population Growth	Scenario #2 Low Population Growth
1990/95	3.4%	3.4%
1996/00	3.5%	3.4%
2001/05	3.6%	3.4%
2006/10	3.7%	3.4%
2010/15	3.7%	3.4%
2016/20	3.8%	3.4%

NB: These growth rates are assumed to apply for both males and females.

These population scenarios are quite conservative since the impact of the family planning programs which are now beginning in Malawi are assumed to be minimal. Likewise, the long-term population effects of the spreading Acquired Immune Deficiency Syndrome (AIDS) are likewise ignored.

2. Educational Scenarios

As mentioned above, three educational scenarios are used in the analysis. These scenarios differ due to degree of effort to expand

or enhance the coverage and effectiveness of the primary education system. In addition to the basic population growth rates identified in the previous section, the desired or expected percentage change in the following variables are specified, on an annual basis, for each scenario:

Enrollment Rates for Standard One, by Gender;

Repetition Rates, by Standard and Gender;

DropOut Rates, by Standard and Gender;

Student/ClassRoom Ratio;

Student/Teacher Ratio in Primary Education;

Teacher Training College UnderEnrollment Rate;

Teacher Training College DropOut Rate;

Urban Teacher Training College Student/Teacher Ratio;

TextBooks/Student Supplied by the System;

Exercise Books/Student Supplied by the System;

Delivery Cost Mark-Up Rates for:
- TextBooks;
- Exercise Books;
- Other Supplies per Student (pencils, ruler, etc.); and
- Other Supplies per ClassRoom (principally chalk). and
- Expected Real GDP Growth Rates.

In addition to the above desired changes, two additional variables are specified indicating whether or not the Urban Teacher Training College Day-Student program is operational and whether or not the GABLE School Fee Program for Non-Repeating Girls is operational.

The first scenario can best be called an attempt to maintain the status quo. In this case, no change in any of the above variables are specified and the two special programs are assumed not to exist.

The second scenario examines the implications of the GOM's goals and objectives for the primary education sub-sector as expressed in the GOM publication Malawi: Towards Education for All (EFA). These goals include an increase in the net enrollment rate for primary education from 53% in 1988/89 to 75% by 1994/95, a student/teacher ratio of 60:1 by 1995/96 with a phased reduction to 50:1 by the year 2000, and the provision of 3 textbooks/student. It is assumed that the MOEC increases the provision of exercise books from a current estimated level of 2/student, to 3/student by school year 1993/94, and to 4/student by 1994/95. The EFA does not specify any goals regarding classrooms. For purposes of this scenario, however, a goal of having a classroom for each teacher by 1995/96 is assumed. This relationship is assumed to hold into the future. Thus, the

target for the student/classroom ratio would be a phased decline from the current level of approximately 87:1 to 60:1 by 1995/96, then to 50:1 by the year 2000. This scenario, however, does not include the effects of the reforms being proposed by GABLE; thus, these projections include neither the efficiency gains expected from GABLE, nor the expected differential impacts on females.

The third scenario starts from the overall objectives of the EFA (the second scenario), but factors in the effects of the GABLE reforms. These reforms include:

- Changes in recruitment policies of Teacher Training Colleges (TTCs) to reduce the under-matriculation rate from 12% to 2% by over recruiting students, and the introduction of a day-student program in three urban TTCs. These reforms would become effective in school year 1993/94. These changes will increase the production of teachers by increasing the capacity utilization of the TTCs from an estimated 76% currently, to 86% for non-urban TTCs and to over 100% of boarding capacity for the three urban TTCs.

- Changes in the procurement and distribution of learning materials (textbooks, exercise books, chalk, etc.). These changes are expected to introduce savings on these materials ranging from 15% to 20% of the current delivered costs of these items. The key component of these changes is the elimination of Malawi Book Service as a middleman between producers and the MOEC, along with a competitive bid process for distribution of the materials. (See the attached Memorandum on this topic for details concerning the specific changes required and estimates of cost-savings.) The effects of these changes would become effective in 1993/94.

- A variety of measures to reduce repetition and drop- out rates at all primary education standards, and to increase female enrollment rates and provide a further reduction in repetition and drop-out rates for females. The effects of these measures are to improve the efficiency of the primary education sector and to improve girls' access, retention and advancement in primary education. An initial effect of the general waiver of tuition fees occurs in 1992/93 and results in an increase in both male and female enrollment rates. The effects of the remaining changes phase-in over the period 1992/93 through 1997/98.

The specifics of each of these three scenarios, as well as their implications, are detailed in the next section.

B. Specifics of the Educational Scenarios

As discussed above, each of the three educational scenarios requires the specification of a wide-range of effects. The changes required to define each of these scenarios are discussed in greater detail in this section. The approach used is to present, for each major set of variables, a table comparing the desired or expected percentage changes for each of the three scenarios**3. For a more detailed

TABLE E.2. GABLE Economic Analysis
Assumptions and Values for Scenario #1
Maintaining the Status Quo

d/

GABLE PAAD Economic Analysis: Status Quo Assumptions

Item\Years	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
% Change Desired in Standard One Enrollme nt Rates:														
Males	NA													
Females	NA													
Implied Values:														
Males	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%
Females	10.4%	10.4%	10.4%	10.4%	10.4%	10.4%	10.4%	10.4%	10.4%	10.4%	10.4%	10.4%	10.4%	10.4%
% Change Desired in Repetition Rates:														
Standard One														
Males	NA													
Females	NA													
Implied Values:														
Males	21.6%	21.6%	21.6%	21.6%	21.6%	21.6%	21.6%	21.6%	21.6%	21.6%	21.6%	21.6%	21.6%	21.6%
Females	21.2%	21.2%	21.2%	21.2%	21.2%	21.2%	21.2%	21.2%	21.2%	21.2%	21.2%	21.2%	21.2%	21.2%
Standard Two														
Males	NA													
Females	NA													
Implied Values:														
Males	20.1%	20.1%	20.1%	20.1%	20.1%	20.1%	20.1%	20.1%	20.1%	20.1%	20.1%	20.1%	20.1%	20.1%
Females	21.3%	21.3%	21.3%	21.3%	21.3%	21.3%	21.3%	21.3%	21.3%	21.3%	21.3%	21.3%	21.3%	21.3%
Standard Three														
Males	NA													
Females	NA													
Implied Values:														
Males	18.5%	18.5%	18.5%	18.5%	18.5%	18.5%	18.5%	18.5%	18.5%	18.5%	18.5%	18.5%	18.5%	18.5%
Females	19.2%	19.2%	19.2%	19.2%	19.2%	19.2%	19.2%	19.2%	19.2%	19.2%	19.2%	19.2%	19.2%	19.2%

GABLE PAAD Economic Analysis: Status Quo Assumptions

Item\Years	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Standard Four														
Males	NA													
Females	NA													
Implied Values														
Males	14.0%	14.0%	14.0%	14.0%	14.0%	14.0%	14.0%	14.0%	14.0%	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Females	15.7%	15.7%	15.7%	15.7%	15.7%	15.7%	15.7%	15.7%	15.7%	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Standard Five														
Males	NA													
Females	NA													
Implied Values														
Males	16.2%	16.2%	16.2%	16.2%	16.2%	16.2%	16.2%	16.2%	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Females	15.7%	15.7%	15.7%	15.7%	15.7%	15.7%	15.7%	15.7%	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Standard Six														
Males	NA													
Females	NA													
Implied Values														
Males	15.1%	15.1%	15.1%	15.1%	15.1%	15.1%	15.1%	15.1%	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Females	17.7%	17.7%	17.7%	17.7%	17.7%	17.7%	17.7%	17.7%	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Standard Seven														
Males	NA													
Females	NA													
Implied Values														
Males	17.0%	17.0%	17.0%	17.0%	17.0%	17.0%	17.0%	17.0%	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Females	20.0%	20.0%	20.0%	20.0%	20.0%	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Standard Eight														
Males	NA													
Females	NA													
Implied Values														
Males	47.0%	47.0%	47.0%	47.0%	47.0%	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Females	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

GABLE PAAD Economic Analysis: Status Quo Assumptions

Item\Years	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
% Change Desired in DropOut Rates:														
Standard One														
Males	NA													
Females	NA													
[illegible]														
Males	31.8%	31.8%	31.8%	31.8%	31.8%	31.8%	31.8%	31.8%	31.8%	31.8%	31.8%	[illegible]	[illegible]	[illegible]
Females	37.8%	37.3%	37.3%	37.3%	37.3%	37.8%	37.8%	37.8%	37.8%	37.3%	37.3%	[illegible]	[illegible]	[illegible]
Standard Two														
Males	NA													
Females	NA													
[illegible]														
Males	21.1%	21.1%	21.1%	21.1%	21.1%	21.1%	21.1%	21.1%	21.1%	21.1%	21.1%	[illegible]	[illegible]	[illegible]
Females	19.8%	19.8%	19.8%	19.8%	19.8%	19.8%	19.8%	19.8%	19.8%	19.8%	19.8%	[illegible]	[illegible]	[illegible]
Standard Three														
Males	NA													
Females	NA													
[illegible]														
Males	22.7%	22.7%	22.7%	22.7%	22.7%	22.7%	22.7%	[illegible]	[illegible]	22.7%	[illegible]	[illegible]	[illegible]	[illegible]
Females	26.8%	26.8%	26.8%	26.8%	26.8%	26.8%	26.8%	[illegible]	26.8%	26.8%	[illegible]	[illegible]	[illegible]	[illegible]
Standard Four														
Males	NA													
Females	NA													
[illegible]														
Males	19.7%	19.7%	19.7%	19.7%	19.7%	19.7%	19.7%	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Females	19.8%	19.8%	19.8%	19.8%	19.8%	19.8%	19.8%	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Standard Five														
Males	NA													
Females	NA													
[illegible]														
Males	18.5%	18.5%	18.5%	18.5%	18.5%	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Females	27.3%	27.3%	27.3%	27.3%	27.3%	[illegible]	[illegible]	[illegible]	[illegible]	27.3%	[illegible]	[illegible]	[illegible]	[illegible]

GABLE PAAD Economic Analysis: Status Quo Assumptions

Item\Years	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Standard Six														
Males	NA													
Females	NA													
[illegible]														
Males	14.7%	14.7%	14.7%	14.7%	14.7%	14.7%	14.7%	[illegible]	[illegible]	[illegible]	[illegible]			
Females	19.7%	19.7%	19.7%	19.7%	19.7%	19.7%	19.7%	[illegible]	[illegible]	[illegible]	[illegible]			
Standard Seven														
Males	NA	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Females	NA													
[illegible]														
Males	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
Females	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
Standard Eight														
Males	NA	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Females	NA	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
[illegible]														
Males	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	[illegible]	[illegible]	[illegible]	[illegible]			
Females	[illegible]	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	[illegible]	[illegible]	[illegible]	[illegible]			

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GABLE PAAD Economic Analysis: Status Quo Assumptions

0.C. ClassRoom Related:

Current ClassRoom Life (years) =	17.4	5.7%
New ClassRoom Life (years) =	35	2.9%
Furnishings Life (years) =	10	10.0%
Teacher Housing Life (years) =	35	2.9%
Minimum Teacher/ClassRoom Ratio =	0.8	
Teacher Houses/ClassRoom =	2.0	
Construction Cost/Classroom (K) =	15,500.0	
Furnishing Cost/New Classroom (K) =	2,800.0	
Classroom Maintenance Cost Rate (K/yr) =	20.0	
Cost/House (K) =	23,000.0	
House Maintenance Cost Rate (K/yr) =	29.7	

Item\Years	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
% Change Desired in Student/Classroom	NA													

GABLE PAAD Economic Analysis: Status Quo Assumptions

0.D. Teacher Related:

Average Remaining Service Time for Current Teachers (years) =	20	5.0%
Expected Service Time for New Teachers (years) =	30	3.3%
Cost/Teacher Added Through Special Programs (K) =	933.3	
Cost/Teacher Added Through TTC Boarding Students (K) =	2,943.7	
Basic Cost/Teacher Added Through the Day Student Program (K) =	2,100.0	
Teacher Salary (K/Teacher) =	1,476.0	
Urban TTC Day Student Program Operating (Y/N)?	N	

Item\Years	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
% Change Desired in Student/Teacher	NA													
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TTC Related:														
% Change Desired in Under Enrollment Rate	NA													
[illegible]	12.0%	12.0%	12.0%	[illegible]	[illegible]	[illegible]	[illegible]	12.0%	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
% Change Desired in Drop-Out Rate	NA													
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
% Change Desired in Urban TTC Student/Teacher Ratio	NA													
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

GABLE PAAD Economic Analysis: Status Quo Assumptions

O.E. Supplies Related:

Expected Life of TextBooks =	3.0	33.3%

DIRECT PURCHASE COSTS

Cost/Set of 3 Basic TextBooks (K/set) =	12.9
Cost/Exercise Book (K/book) =	0.6
Cost of Other Supplies/Student =	2.1
Cost of Other Supplies/Classroom(K/yr) =	31.9

DELIVERY COST MARK-UP RATES

TextBooks =	42.7%
Exercise Books =	99.5%
Other Per Student Supplies =	20.0%
Other per Classroom Supplies =	45.7%

Item\Years	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
% Change Desired in Textbooks/Student	NA													
Implied Textbooks/Student	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
% Change Desired in Exercise Bks/St	NA													
Implied Exercise Books/Student	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
% Change Desired in Delivery Cost Mark-Up Rate for:														
TextBooks	NA													
Exercise Books	NA													
Other Supplies/Student	NA													
Other Supplies/ClassRoom	NA													
Implied Mark-Up Rate(s) for:														
Textbooks	42.7%	42.7%	42.7%	42.7%	42.7%	42.7%	42.7%	42.7%	42.7%	42.7%	42.7%	42.7%	42.7%	42.7%
Exercise Books	99.5%	99.5%	99.5%	99.5%	99.5%	99.5%	99.5%	99.5%	99.5%	99.5%	99.5%	99.5%	99.5%	99.5%
Other Supplies/Student	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%
Other Supplies/Classroom	45.7%	45.7%	45.7%	45.7%	45.7%	45.7%	45.7%	45.7%	45.7%	45.7%	45.7%	45.7%	45.7%	45.7%

GABLE PAAD Economic Analysis: Status Quo Assumptions

0.F. Other GOM Budgetary Costs

GABLE School Fee Program Exists (Y/N)? N

0.G. Macroeconomic Framework Related:

Item/Years	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Expected GDP Growth Rates	NA	NA	NA	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%

NB: World Bank Estimate for Long Term Gro wth. Sustainability guaranteed through Limit on total GOM Expenditures/GDP, along with Revenues/GDP of 20%.
Combined these factors imply a sustainabl e deficit, excluding Grants, of 6% of GDP.

TABLE E.3. GABLE Economic Analysis Assumptions and Values for Scenario #1 Education For All Objectives, No Reforms

GABLE PAAD Economic Analysis: EFA/No Reforms Assumptions

Item\Years	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
% Change Desired in Standard One Enrollment Rates:														
Males	NA	0.0%	0.0%	3.1%	4.5%	5.8%	2.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Females	NA	0.0%	0.0%	3.1%	4.5%	5.8%	2.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Implied Values:														
Males	12.0%	12.0%	12.0%	12.4%	12.5%	13.7%	14.1%	14.1%	14.1%	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Females	10.6%	10.6%	10.6%	10.7%	11.3%	11.9%	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
% Change Desired in Repetition Rates:														
Standard One														
Males	NA													
Females	NA													
Implied Values:														
Males	21.6%	21.6%	21.6%	21.6%	21.6%	21.6%	21.6%	21.6%	21.6%	21.6%	21.6%	21.6%	21.6%	[illegible]
Females	21.3%	21.2%	21.2%	21.3%	21.2%	21.2%	21.2%	21.3%	21.3%	21.3%	21.3%	21.3%	21.3%	[illegible]
Standard Two														
Males	NA													
Females	NA													
Implied Values:														
Males	20.1%	20.1%	20.1%	20.1%	20.1%	20.1%	20.1%	20.1%	20.1%	20.1%	20.1%	20.1%	[illegible]	[illegible]
Females	21.3%	21.3%	21.6%	21.6%	21.3%	21.3%	21.3%	21.3%	21.3%	21.6%	21.6%	21.6%	21.3%	[illegible]
Standard Three														
Males	NA													
Females	NA													
Implied Values:														
Males	18.5%	18.5%	19.3%	19.6%	18.6%	[illegible]	18.6%	18.6%	18.6%	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Females	19.2%	19.2%	19.6%	19.6%	19.3%	[illegible]	19.6%	[illegible]	19.6%	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

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GABLE PAAD Economic Analysis: EFA/No Reforms Assumptions

Item\Years	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Standard Four														
Males	NA													
Females	NA													
Implied Values														
Males	14.6%	14.6%	14.6%	14.6%	14.6%	14.6%	14.6%	14.6%	14.6%	14.6%	14.6%	14.6%	14.6%	[illegible]
Females	15.7%	15.7%	15.7%	15.7%	15.7%	15.7%	15.7%	15.7%	15.7%	15.7%	15.7%	[illegible]	15.7%	[illegible]
Standard Five														
Males	NA													
Females	NA													
Implied Values														
Males	16.2%	16.2%	16.2%	16.2%	16.2%	16.2%	16.2%	16.2%	16.2%	16.2%	16.2%	16.2%	16.2%	[illegible]
Females	15.7%	15.7%	15.7%	15.7%	15.7%	15.7%	[illegible]	15.7%	15.7%	15.7%	15.7%	15.7%	15.7%	[illegible]
Standard Six														
Males	NA													
Females	NA													
Implied Values														
Males	15.1%	15.1%	15.1%	15.1%	15.1%	15.1%	15.1%	15.1%	15.1%	15.1%	15.1%	15.1%	15.1%	[illegible]
Females	17.7%	17.7%	17.7%	17.7%	17.7%	17.7%	17.7%	17.7%	17.7%	17.7%	17.7%	17.7%	17.7%	[illegible]
Standard Seven														
Males	NA													
Females	NA													
Implied Values														
Males	17.6%	17.6%	17.6%	17.6%	17.6%	17.6%	17.6%	17.6%	17.6%	17.6%	17.6%	17.6%	17.6%	[illegible]
Females	20.6%	20.6%	20.6%	20.6%	20.6%	20.6%	20.6%	20.6%	20.6%	20.6%	20.6%	20.6%	20.6%	[illegible]
Standard Eight														
Males	NA													
Females	NA													
Implied Values														
Males	47.0%	47.0%	47.0%	47.0%	47.0%	47.0%	47.0%	[illegible]	47.0%	47.0%	47.0%	47.0%	47.0%	[illegible]
Females	46.0%	46.0%	46.0%	46.0%	46.0%	[illegible]	[illegible]	[illegible]	46.0%	[illegible]	46.0%	[illegible]	[illegible]	[illegible]

GABLE PAAD Economic Analysis: EFA/No Reforms Assumptions

Item\Years	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
% Change Desired in DropOut Rates:														
Standard One														
Males	NA													
Females	NA													
Implied Values														
Males	31.8%	31.8%	31.8%	31.8%	31.8%	31.8%	31.8%	31.8%	31.8%	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Females	37.3%	37.3%	37.3%	37.3%	37.3%	37.3%	37.3%	37.3%	37.3%	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Standard Two														
Males	NA													
Females	NA													
Implied Values														
Males	21.1%	21.1%	21.1%	21.1%	21.1%	21.1%	21.1%	21.1%	21.1%	21.1%	21.1%	21.1%	21.1%	[illegible]
Females	19.8%	19.8%	19.8%	19.8%	19.8%	19.8%	19.8%	19.8%	19.8%	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Standard Three														
Males	NA													
Females	NA													
Implied Values														
Males	22.7%	22.7%	22.7%	22.7%	22.7%	22.7%	22.7%	22.7%	22.7%	22.7%	22.7%	22.7%	22.7%	[illegible]
Females	26.9%	26.9%	26.9%	26.9%	26.9%	26.9%	26.9%	26.9%	26.9%	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Standard Four														
Males	NA													
Females	NA													
Implied Values														
Males	19.7%	19.7%	19.7%	19.7%	19.7%	19.7%	19.7%	19.7%	19.7%	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Females	19.8%	19.8%	19.8%	19.8%	19.8%	19.8%	19.8%	19.8%	19.8%	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Standard Five														
Males	NA													
Females	NA													
Implied Values														
Males	19.3%	19.3%	19.8%	19.8%	19.8%	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Females	27.3%	27.3%	27.3%	27.3%	27.3%	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

GABLE PAAD Economic Analysis: EFA/No Reforms Assumptions

Item\Years	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Standard Six														
Males	NA													
Females	NA													
Implied Valuation														
Males	14.7%	14.7%	14.7%	14.7%	14.7%	14.7%	14.7%	14.7%	14.7%	14.7%	14.7%			
Females	19.7%	19.7%	19.7%	19.7%	19.7%	19.7%	19.7%	19.7%	19.7%	19.7%	19.7%			
Standard Seven														
Males	NA	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Females	NA													
Implied Valuation														
Males	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
Females	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
Standard Eight														
Males	NA	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Females	NA	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Implied Valuation														
Males	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
Females	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			

GABLE PAAD Economic Analysis: EFA/No Reforms Assumptions

O.C. ClassRoom Related:

Current ClassRoom Life (years) =	17.4	5.7%
New ClassRoom Life (years) =	35	2.9%
Furnishings Life (years) =	10	10.0%
Teacher Housing Life (years) =	35	2.9%

Minimum Teacher/ClassRoom Ratio =	0.8
Teacher Houses/ClassRoom =	2.0
Construction Cost/Classroom (K) =	15,500.0
Furnishing Cost/New Classroom (K) =	2,800.0
Classroom Maintenance Cost Rate (K/yr) =	20.0
Cost/House (K) =	23,000.0
House Maintenance Cost Rate (K/yr) =	29.7

Item\Years	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
% Change Desired in Student/Classroom	NA	0.0%	0.0%	-6.2%	-6.5%	-7.1%	-7.5%	-8.3%	-4.2%	-4.3%	-4.5%	-4.5%	0.0%	0.0%
Implied Student/Classroom	[illegible]	[illegible]	[illegible]	31.4	29.1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

GABLE PAAD Economic Analysis: EFA/No Reforms Assumptions

0.D. Teacher Related:

Average Remaining Service Time for Current Teachers (years) =	20	5.0%
Expected Service Time for New Teachers (years) =	30	3.3%
Cost/Teacher Added Through Special Programs (K) =	933.3	
Cost/Teacher Added Through TTC Boarding Students (K) =	2,943.7	
Basic Cost/Teacher Added Through the Day Student Program (K) =	2,100.0	
Teacher Salary (K/Teacher) =	1,476.0	
Urban TTC Day Student Program Operating (Y/N)?	N	

Item\Years	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
% Change Desired in Student/Teacher	NA	0.0%	0.0%	-2.1%	-3.0%	-3.1%	-4.8%	0.0%	-4.2%	-4.3%	-4.5%	-4.8%	0.0%	0.0%
Implied Students/Teacher	66.5	66.5	66.5	67.0	65.0	63.0	60.0	60.0	57.5	[illegible]	52.0	[illegible]	[illegible]	[illegible]
TTC Related:														
% Change Desired in Under Enrollment Rate	NA													
Implied TTC Underenrollment Rate	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	[illegible]	[illegible]
% Change Desired in Drop-Out Rate	NA													
Implied TTC Drop-Out Rate	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	14.0%	14.0%	12.0%	10.0%	12.0%	12.0%	[illegible]	[illegible]
% Change Desired in Urban TTC Student/Teacher Ratio	NA													
Implied Urban TTC Student/Teacher	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	[illegible]	[illegible]	[illegible]

GABLE PAAD Economic Analysis: EFA/No Reforms Assumptions

O.E. Supplies Related:

Expected Life of TextBooks =	3.0	33.3%

DIRECT PURCHASE COSTS

Cost/Set of 3 Basic TextBooks (K/set) =	12.9
Cost/Exercise Book (K/book) =	0.6
Cost of Other Supplies/Student =	2.1
Cost of Other Supplies/Classroom(K/yr) =	31.9

DELIVERY COST MARK-UP RATES

TextBooks =	42.7%
Exercise Books =	99.5%
Other Per Student Supplies =	20.0%
Other per Classroom Supplies =	45.7%

Item\Years	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
% Change Desired in Textbooks/Student	NA	0.0%	0.0%	14.3%	14.3%	12.5%	11.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Implied Textbooks/Student	1.8	1.8	1.8	2.1	2.4	2.7	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
% Change Desired in Exercise Bks/St	NA	0.0%	0.0%	50.0%	0.0%	0.0%	33.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Implied Exercise Books/Student	2.0	2.0	2.0	3.0	3.0	3.0	4.0	[illegible]	4.0	4.0	[illegible]	[illegible]	[illegible]	[illegible]
% Change Desired in Delivery Cost Mark-Up Rate for:														
TextBooks	NA													
Exercise Books	NA													
Other Supplies/Student	NA													
Other Supplies/ClassRoom	NA													
Implied Mark-Up Rate for:														
Textbooks	42.7%	42.7%	42.7%	42.7%	42.7%	42.7%	42.7%	42.7%	42.7%	42.7%	42.7%	42.7%	[illegible]	[illegible]
Exercise Books	99.5%	99.5%	99.5%	99.5%	99.5%	99.5%	99.5%	99.5%	99.5%	99.5%	99.5%	99.5%	[illegible]	[illegible]
Other Supplies/Student	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	[illegible]	[illegible]
Other Supplies/Classroom	45.7%	45.7%	45.7%	45.7%	45.7%	45.7%	45.7%	45.7%	45.7%	45.7%	45.7%	45.7%	[illegible]	[illegible]

GABLE PAAD Economic Analysis: EFA/No Reforms Assumptions

0.F. Other GOM Budgetary Costs

GABLE School Fee Program Exists (Y/N)? N

0.G. Macroeconomic Framework Related:

Item\FieYears	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Expected GDP Growth Rates	NA	NA	NA	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%

NB: World Bank Estimate for Long Term Gro wth. Sustainability guaranteed through Limit on total GOM Expenditures/GDP, along with Revenues/GDP of 20%.
Combined these factors imply a sustainabl e deficit, excluding Grants, of 6% of GDP.

TABLE E.4. GABLE Economic Analysis
Assumptions and Values for Scenario #1
Education For All Objectives, GABLE Reforms

GABLE PAAD Economic Analysis: EFA/Reforms

Item\Years	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
% Change Desired in Standard One Enrollme nt Rates:														
Males	NA	0.0%	0.0%	3.1%	4.5%	5.8%	2.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Females	NA	0.0%	0.0%	3.1%	16.0%	5.8%	2.7%	0.0%	5.0%	0.0%	-1.6%	0.0%	0.0%	0.0%
Implied Values														
Males	12.0%	12.0%	12.0%	12.4%	13.0%	[illegible]	[illegible]	14.1%	14.1%	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Females	10.4%	10.4%	10.4%	10.7%	12.4%	[illegible]	[illegible]	13.8%	14.8%	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
% Change Desired in Repetition Rates:														
Standard One														
Males	NA	0.0%	0.0%	0.0%	0.0%	10.0%	-19.0%	-22.0%	0.0%	-23.8%	0.0%	0.0%	0.0%	0.0%
Females	NA	0.0%	0.0%	0.0%	-31.2%	-10.0%	-19.0%	-22.0%	0.0%	35.5%	0.0%	0.0%	0.0%	0.0%
Implied Values														
Males	21.8%	21.8%	21.8%	21.8%	21.8%	[illegible]	[illegible]	18.1%	18.1%	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Females	21.3%	21.3%	21.3%	21.8%	14.6%	13.1%	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Standard Two														
Males	NA	0.0%	0.0%	0.0%	0.0%	18.7%	-19.0%	-22.0%	0.0%	-23.7%	0.0%	0.0%	0.0%	0.0%
Females	NA	0.0%	0.0%	0.0%	-31.2%	-10.0%	-19.0%	-22.0%	0.0%	35.5%	0.0%	0.0%	0.0%	0.0%
Implied Values														
Males	20.1%	20.1%	20.1%	20.1%	20.1%	[illegible]	[illegible]	18.1%	18.1%	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Females	21.3%	21.3%	21.8%	21.8%	14.6%	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Standard Three														
Males	NA	0.0%	0.0%	0.0%	0.0%	10.0%	-19.0%	-22.0%	0.0%	-23.8%	0.0%	0.0%	0.0%	0.0%
Females	NA	0.0%	0.0%	0.0%	-31.2%	-10.0%	-19.0%	-22.0%	0.0%	35.5%	0.0%	0.0%	0.0%	0.0%
Implied Values														
Males	18.5%	18.5%	18.5%	18.5%	18.5%	[illegible]	[illegible]	12.8%	12.8%	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Females	19.2%	19.2%	19.2%	19.2%	19.2%	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

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GABLE PAAD Economic Analysis: EFA/Reforms

Item\Years	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Standard Four														
Males	NA	0.0%	0.0%	0.0%	0.0%	10.0%	-19.0%	-22.0%	0.0%	-23.8%	0.0%	0.0%	0.0%	0.0%
Females	NA	0.0%	0.0%	0.0%	-31.2%	-10.0%	-19.0%	-22.0%	0.0%	35.5%	0.0%	0.0%	0.0%	0.0%
Implied Values														
Males	14.9%	14.9%	14.9%	14.9%	14.9%	16.9%	18.9%	18.9%	16.9%	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Females	15.7%	15.7%	15.7%	15.7%	15.6%	8.7%	7.8%	8.1%	8.1%	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Standard Five														
Males	NA	0.0%	0.0%	0.0%	0.0%	10.0%	-19.0%	-22.0%	0.0%	-23.7%	0.0%	0.0%	0.0%	0.0%
Females	NA	0.0%	0.0%	0.0%	-31.2%	-10.0%	-19.0%	-22.0%	0.0%	35.5%	0.0%	0.0%	0.0%	0.0%
Implied Values														
Males	16.2%	16.2%	16.2%	16.2%	16.2%	30.0%	16.2%	16.7%	16.7%	9.7%	9.7%	[illegible]	[illegible]	[illegible]
Females	15.7%	15.7%	15.7%	15.7%	16.6%	8.7%	7.0%	8.8%	8.8%	8.8%	[illegible]	[illegible]	[illegible]	[illegible]
Standard Six														
Males	NA	0.0%	0.0%	0.0%	0.0%	10.0%	-19.0%	-22.0%	0.0%	-23.7%	0.0%	0.0%	0.0%	0.0%
Females	NA	0.0%	0.0%	0.0%	-31.2%	-10.0%	-19.0%	-22.0%	0.0%	35.5%	0.0%	0.0%	0.0%	0.0%
Implied Values														
Males	15.1%	15.1%	15.1%	15.1%	15.1%	15.0%	19.8%	10.8%	10.8%	6.0%	6.0%	[illegible]	[illegible]	[illegible]
Females	17.7%	17.7%	17.7%	17.7%	12.2%	11.0%	8.9%	6.9%	6.9%	9.4%	9.4%	[illegible]	[illegible]	[illegible]
Standard Seven														
Males	NA	0.0%	0.0%	0.0%	0.0%	10.0%	-19.0%	-22.0%	0.0%	-23.7%	0.0%	0.0%	0.0%	0.0%
Females	NA	0.0%	0.0%	0.0%	-31.2%	-10.0%	-19.0%	-22.0%	0.0%	35.5%	0.0%	0.0%	0.0%	0.0%
Implied Values														
Males	17.8%	17.8%	17.8%	17.8%	17.8%	19.8%	16.8%	16.4%	16.4%	9.8%	[illegible]	[illegible]	[illegible]	[illegible]
Females	20.8%	20.8%	20.8%	20.8%	14.3%	14.0%	10.4%	8.4%	8.4%	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Standard Eight														
Males	NA	0.0%	0.0%	-21.2%	0.0%	-73.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Females	NA	0.0%	0.0%	-22.2%	-11.5%	-67.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Implied Values														
Males	67.5%	67.5%	67.5%	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Females	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

GABLE PAAD Economic Analysis: EFA/Reforms

Item\Years	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
% Change Desired in DropOut Rates:														
Standard One														
Males	NA	0.0%	0.0%	0.0%	-5.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Females	NA	0.0%	0.0%	0.0%	-5.1%	-2.0%	0.0%	-5.0%	0.0%	2.0%	0.0%	0.0%	0.0%	0.0%
Implied Values														
Males	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]			
Females	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]			
Standard Two														
Males	NA	0.0%	0.0%	0.0%	-0.1%	-5.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Females	NA	0.0%	0.0%	0.0%	-10.2%	3.0%	0.0%	-5.0%	0.0%	2.0%	0.0%	0.0%	0.0%	0.0%
Implied Values														
Males	21.1%	21.1%	21.1%	21.1%	21.1%	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]			
Females	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]			
Standard Three														
Males	NA	0.0%	0.0%	0.0%	0.0%	0.0%	-4.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Females	NA	0.0%	0.0%	0.0%	-10.1%	-2.0%	5.0%	-5.0%	0.0%	2.0%	0.0%	0.0%	0.0%	0.0%
Implied Values														
Males	22.7%	22.7%	22.7%	22.7%	22.7%	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]			
Females	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]			
Standard Four														
Males	NA	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-4.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Females	NA	0.0%	0.0%	0.0%	-9.9%	-2.0%	0.0%	-0.3%	0.0%	2.0%	0.0%	0.0%	0.0%	0.0%
Implied Values														
Males	19.7%	19.7%	19.7%	19.7%	19.7%	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]			
Females	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]			
Standard Five														
Males	NA	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Females	NA	0.0%	0.0%	0.0%	-9.8%	-2.0%	0.0%	-10.0%	0.0%	12.0%	0.0%	0.0%	0.0%	0.0%
Implied Values														
Males	[illegible]	[illegible]	[illegible]	[illegible]										
Females	[illegible]	[illegible]	[illegible]	[illegible]										

GABLE PAAD Economic Analysis: EFA/Reforms

Item\Years	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Standard Six														
Males	NA	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Females	NA	0.0%	0.0%	0.0%	-10.1%	-2.0%	0.0%	-5.0%	0.0%	12.2%	0.0%	0.0%	0.0%	0.0%
Implied Values														
Males	14.7%	14.7%	14.7%	14.7%	14.7%	14.7%	14.7%	14.7%	14.7%	14.7%	14.7%	14.7%	14.7%	[illegible]
Females	19.7%	19.7%	19.7%	19.7%	17.7%	17.4%	17.4%	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Standard Seven														
Males	NA	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Females	NA	0.0%	0.0%	0.0%	0.0%	-2.1%	0.0%	-5.0%	0.0%	2.0%	0.0%	0.0%	0.0%	0.0%
Implied Values														
Males	0.0%	0.0%	0.0%	0.0%	0.0%	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Females	0.0%	0.0%	0.0%	0.0%	0.0%	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Standard Eight														
Males	NA	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Females	NA	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Implied Values														
Males	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Females	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	[illegible]

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GABLE PAAD Economic Analysis: EFA/Reforms

0.C. ClaseRoom Related:

Current ClaseRoom Life(years) =	17.4	5.7%
New ClaseRoom Life (years) =	35	2.9%
Furnishings Life (years) =	10	10.0%
Teacher Housing Life (years) =	35	2.9%
Minimum Teacher/ClaseRoom Ratio =	0.8	
Teacher Houses/ClaseRoom =	2.0	
Construction Cost/Classroom (K) =	15,500.0	
Furnishing Cost/New Classroom: (K) =	2,800.0	
Classroom Maintenance Cost Rate (K/yr) =	20.0	
Cost/House (K) =	23,000.0	
House Maintenance Cost Rate (K/yr) =	29.7	

Item\Years	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
% Change Desired in Student/Classroom	NA	0.0%	0.0%	-6.2%	-6.5%	-7.1%	-7.5%	-8.3%	-4.2%	-4.3%	-4.5%	-4.6%	0.0%	0.0%
[illegible]	[illegible]	[illegible]	[illegible]	91.4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

GABLE PAAD Economic Analysis: EFA/Reforme

0.D. Teacher Related:

Average Remaining Service Time for Current Teachers (years) =	20	5.0%
Expected Service Time for New Teachers (years) =	30	3.3%
Cost/Teacher Added Through Special Programs (K) =	933.3	
Cost/Teacher Added Through TTC Boarding Students (K) =	2,943.7	
Basic Cost/Teacher Added Through the Day Student Program (K) =	2,100.0	
Teacher Salary (K/Teacher) =	1,476.0	
Urban TTC Day Student Program Operating (Y/N)?	Y	

Item\Years	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
% Change Desired in Student/Teacher	NA	0.0%	0.0%	-2.1%	-3.0%	-3.1%	-4.8%	0.0%	-4.2%	-4.3%	-4.5%	-4.8%	0.0%	0.0%
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
TTC Related:														
% Change Desired in Under Enrollment Rate	NA	0.0%	0.0%	0.0%	0.0%	-83.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
% Change Desired in Drop-Out Rate	NA	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
% Change Desired in Urban TTC Student/Teacher Ratio	NA	0.0%	0.0%	0.0%	0.0%	42.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

GABLE PAAD Economic Analysis: EFA/Reforms

0.E. Supplies Related:

Expected Life of TextBooks =	3.0	33.3%

DIRECT PURCHASE COSTS

Cost/Set of 3 Basic TextBooks (K/set) =	12.9
Cost/Exercise Book (K/book) =	0.6
Cost of Other Supplies/Student =	2.1
Cost of Other Supplies/Classroom(K/yr) =	31.9

DELIVERY COST MARK-UP RATES

TextBooks =	42.7%
Exercise Books =	99.5%
Other Per Student Supplies =	20.0%
Other per Classroom Supplies =	45.7%

Item\Years	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
% Change Desired in Textbooks/Student	NA	0.0%	0.0%	14.3%	14.3%	12.5%	11.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Implied Textbooks/Student	1.8	1.8	1.8	2.1	2.4	2.7	3.0	3.0	3.0	3.0	3.0	[illegible]	[illegible]	[illegible]
% Change Desired in Exercise Bks/St	NA	0.0%	0.0%	50.0%	0.0%	0.0%	33.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Implied Exercise Books/Student	2.0	2.0	2.0	3.0	3.0	3.0	4.0	4.0	4.0	4.0	4.0	4.0	[illegible]	[illegible]
% Change Desired in Delivery Cost Mark-Up Rate for:														
TextBooks	NA	0.0%	0.0%	0.0%	0.0%	-57.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Exercise Books	NA	0.0%	0.0%	0.0%	0.0%	-79.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other Supplies/Student	NA	0.0%	0.0%	0.0%	0.0%	-10.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other Supplies/ClassRoom	NA	0.0%	0.0%	0.0%	0.0%	-60.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Implied Mark-Up Rate														
Textbooks	42.7%	42.7%	42.7%	42.7%	42.7%	17.5%	17.5%	17.5%	17.5%	17.5%	17.5%	17.5%	[illegible]	[illegible]
Exercise Books	99.5%	99.5%	99.5%	99.5%	99.5%	99.5%	99.5%	99.5%	99.5%	99.5%	99.5%	99.5%	[illegible]	[illegible]
Other Supplies/Student	20.0%	20.0%	20.0%	20.0%	20.0%	18.0%	16.2%	14.6%	13.1%	11.8%	10.6%	9.6%	[illegible]	[illegible]
Other Supplies/Classroom	45.7%	45.7%	45.7%	45.7%	45.7%	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

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GABLE PAAD Economic Analysis: EFA/Reforms

0.F. Other GOM Budgetary Costs

GABLE School Fee Program Exists (Y/N)? Y

0.G. Macroeconomic Framework Related:

Item\FiscYears	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Expected GDP Growth Rates	NA	NA	NA	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%

NB: World Bank Estimate for Long Term Gro wth. Sustainability guaranteed through Limit on total GOM Expenditures/GDP, along with Revenues/GDP of 20%.
Combined these factors imply a sustainabl e deficit, excluding Grants, of 6% of GDP.

discussion of how the Scenario 3 targets were derived, see the Consultant's Report (Annex 3 to this Attachment).*. In addition, Tables E.2, E.3, and E.4 show the effects of the desired changes on the target variables for each scenario.

B.1. Standard One Enrollment Rates

The first key variable which enters the analysis is the standard one enrollment rate, i.e., the proportion of the primary school aged population that enters standard one each year. Based on data from the 1988/89 school year these rates were 12.4 percent for males and 10.4 percent for females.

Table E.5 indicates the percentage changes in the gender specific enrollment rates for Standard One under each Scenario. The changes indicated for Scenario 2 are based upon the percentage changes in the net enrollment rate for total primary education under the GOM's general goals and objectives for primary education. Even though these goals and objectives are used to derive these percentage changes in standard one enrollment rates, it should be noted that these increases are not sufficient to achieve the desired overall net enrollment rates as specified in the EFA document. As this analysis will show, the achievement of the 75 percent net enrollment figure for primary education is not likely to be either achievable or affordable within the near- term or medium-term.

The differences between Scenario 2 and Scenario 3 represent the effects of the GABLE supported policy changes, as well as, the social awareness campaign supported by GABLE.

TABLE E.5.

Standard One Enrollment Rate Changes
By Gender and Scenario
(Percent Change)

School Year	Scenario 1		Scenario 2		Scenario 3	
	Male	Female	Male	Female	Male	Female
1992	0.0	0.0	3.1	3.1	3.1	3.1
1993	0.0	0.0	4.5	4.5	4.5	16.0
1994	0.0	0.0	5.8	5.8	5.8	5.8
1995	0.0	0.0	2.7	2.7	2.7	2.7
1996	0.0	0.0	0.0	0.0	0.0	0.0
1997	0.0	0.0	0.0	0.0	0.0	5.0
1998	0.0	0.0	0.0	0.0	0.0	0.0
1999	0.0	0.0	0.0	0.0	0.0	-1.6

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B.2. Repetition Rates

One of the key characteristics of Malawi's primary education system is its high repetition rates, i.e., the proportion of base enrollment for a given period that repeats the same standard during the next year. These high repetition rates contribute to the inefficiency of sub-sector which is currently characterized by the fact that more than ten years are required to produce a graduate of standard 4 and more than twenty years are required to produce a graduate of standard 8. Based on data for the 1988/89 school, these repetition rates ranged from 14.8 percent to 47 percent for males and 15.7 percent to 45 percent for females. Table E.6 presents the initial distribution, by standard and gender of these repetition rates.

TABLE E.6.

Existing Repetition Rates for 1988/89
By Standard and Gender
(Percentage Rates)

Standard	Repetition Rate Male	Repetition Rate Female
One	21.8	21.2
Two	20.1	21.3
Three	18.5	19.2
Four	14.8	15.7
Five	18.2	15.7
Six	15.1	17.7
Seven	17.8	20.8
Eight	47.0	45.0

The desired percentage changes in these repetition rates for each scenario are given in Table E.7. This, along with the effects on drop-out rates, is the key area where GABLE acts to improve the efficiency of Malawi's primary education system. The principal GABLE policy items affecting repetition rates are the 75/20/05 entrance policy for Form 1, a general reduction in average repetition rates, and the payment of tuition and school fees for non-repeating females. The increase in female repetition rates in 1998 occur due to the elimination of the GABLE tuition and fee payments for non-repeating girls.

B.3. Drop-Out Rates

The other major contributing factor to the inefficiency of Malawi's primary education system is the relatively high drop- out rates for students. As shown in Table E.8, approximately one-third of all students entering standard one drop-out, with a rate varying around twenty percent for standards two through six. While minimal or no drop-outs are shown for standards seven and eight, this may be strictly due to the inability to accurately track students and the high repetition rates for standard eight.

TABLE E.7.

Repetition Rate Changes,
By Standard, Gender and Scenario
(Percent Change)

School Year	Scenario 1 Male	Scenario 1 Female	Scenario 2 Male	Scenario 2 Female	Scenario 3 Male	Scenario 3 Female
Standard One:						
1992	0.0	0.0	0.0	0.0	0.0	0.0
1993	0.0	0.0	0.0	0.0	0.0	-31.2
1994	0.0	0.0	0.0	0.0	10.0	-10.0
1995	0.0	0.0	0.0	0.0	-19.0	-19.0
1996	0.0	0.0	0.0	0.0	-22.0	-22.0
1997	0.0	0.0	0.0	0.0	0.0	0.0
1998	0.0	0.0	0.0	0.0	-23.8	35.5
Standard Two:						
1992	0.0	0.0	0.0	0.0	0.0	0.0
1993	0.0	0.0	0.0	0.0	0.0	-31.2
1994	0.0	0.0	0.0	0.0	18.7	-10.0
1995	0.0	0.0	0.0	0.0	-19.0	-19.0
1996	0.0	0.0	0.0	0.0	-22.0	-22.0
1997	0.0	0.0	0.0	0.0	0.0	0.0
1998	0.0	0.0	0.0	0.0	-23.7	35.5
Standard Three:						
1992	0.0	0.0	0.0	0.0	0.0	0.0
1993	0.0	0.0	0.0	0.0	0.0	-31.2
1994	0.0	0.0	0.0	0.0	10.0	-10.0
1995	0.0	0.0	0.0	0.0	-19.0	-19.0
1996	0.0	0.0	0.0	0.0	-22.0	-22.0
1997	0.0	0.0	0.0	0.0	0.0	0.0
1998	0.0	0.0	0.0	0.0	-23.8	35.5
Standard Four:						
1992	0.0	0.0	0.0	0.0	0.0	0.0
1993	0.0	0.0	0.0	0.0	0.0	-31.2
1994	0.0	0.0	0.0	0.0	10.0	-10.0
1995	0.0	0.0	0.0	0.0	-19.0	-19.0
1996	0.0	0.0	0.0	0.0	-22.0	-22.0
1997	0.0	0.0	0.0	0.0	0.0	0.0
1998	0.0	0.0	0.0	0.0	-23.8	35.5

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TABLE E.7.

Repetition Rate Changes, By Standard

Gender and Scenario
(continued)
(Percent Change)

School Year	Scenario 1 Male	Scenario 1 Female	Scenario 2 Male	Scenario 2 Female	Scenario 3 Male	Scenario 3 Female
Standard Five:						
1992	0.0	0.0	0.0	0.0	0.0	0.0
1993	0.0	0.0	0.0	0.0	0.0	-31.2
1994	0.0	0.0	0.0	0.0	10.0	-10.0
1995	0.0	0.0	0.0	0.0	-19.0	-19.0
1996	0.0	0.0	0.0	0.0	-22.0	-22.0
1997	0.0	0.0	0.0	0.0	0.0	0.0
1998	0.0	0.0	0.0	0.0	-23.7	35.5
Standard Six:						
1992	0.0	0.0	0.0	0.0	0.0	0.0
1993	0.0	0.0	0.0	0.0	0.0	-31.2
1994	0.0	0.0	0.0	0.0	10.0	-10.0
1995	0.0	0.0	0.0	0.0	-19.0	-19.0
1996	0.0	0.0	0.0	0.0	-22.0	-22.0
1997	0.0	0.0	0.0	0.0	0.0	0.0
1998	0.0	0.0	0.0	0.0	-23.7	35.5
Standard Seven:						
1992	0.0	0.0	0.0	0.0	0.0	0.0
1993	0.0	0.0	0.0	0.0	0.0	-31.2
1994	0.0	0.0	0.0	0.0	10.0	-10.0
1995	0.0	0.0	0.0	0.0	-19.0	-19.0
1996	0.0	0.0	0.0	0.0	-22.0	-22.0
1997	0.0	0.0	0.0	0.0	0.0	0.0
1998	0.0	0.0	0.0	0.0	-23.7	35.5
Standard Eight:						
1992	0.0	0.0	0.0	0.0	0.0	0.0
1993	0.0	0.0	0.0	0.0	-21.2	-22.2
1994	0.0	0.0	0.0	0.0	0.0	-11.5
1995	0.0	0.0	0.0	0.0	-73.0	-67.7
1996	0.0	0.0	0.0	0.0	0.0	0.0
1997	0.0	0.0	0.0	0.0	0.0	0.0
1998	0.0	0.0	0.0	0.0	0.0	0.0

TABLE E.8.

Drop-Out Rates for 1988/89,
By Standard and Gender
(Percentage Rates)

Standard	Drop-Out Rates Male	Female
One	31.8	37.3
Two	21.1	19.5
Three	22.7	26.9
Four	19.7	18.6
Five	18.3	27.3
Six	14.7	19.7
Seven	0.0	9.0
Eight	0.0	0.0

The desired or expected changes in these drop-out rates are presented in Table E.9. The principal GABLE activities which are expected to influence these drop-out rates under scenario 3 are the increase in of learning materials, the social awareness campaign, and the tuition and school fee waiver programs.

B.4. Quality and Learning Materials Ratios

In addition to the variables outlined above, another set of key parameters are the values of the following ratios: Students/ClassRoom, Students/Teacher, TextBooks/Student, and Exercise Books/Student. The values of these variables influence the learning environment for students and are key variables for affecting the quality of education. Table E.10 gives the initial values of these variables based on information for the 1988/89 school year.

As can be seen from these values, students are extremely congested in their classrooms and can receive little individual attention. Likewise, full sets of textbooks are not available for all subjects. In the absence of textbooks, exercise books provide the possibility of studying classroom material at home, but the supply of exercise books is also inadequate. For these reasons, the GOM has developed objectives to improve the availability of classrooms, teachers, textbooks and exercise books for students.

TABLE E.9.

Drop-Out Rate Changes
By Standard, Gender and Scenario
(Percent Change)

School Year	Scenario 1 Male	Scenario 1 Female	Scenario 2 Male	Scenario 2 Female	Scenario 3 Male	Scenario 3 Female
Standard One:						
1992	0.0	0.0	0.0	0.0	0.0	0.0
1993	0.0	0.0	0.0	0.0	- 5.0	- 5.1
1994	0.0	0.0	0.0	0.0	0.0	- 2.0
1995	0.0	0.0	0.0	0.0	0.0	0.0
1996	0.0	0.0	0.0	0.0	0.0	- 5.0
1997	0.0	0.0	0.0	0.0	0.0	0.0
1998	0.0	0.0	0.0	0.0	0.0	2.0
Standard Two:						
1992	0.0	0.0	0.0	0.0	0.0	0.0
1993	0.0	0.0	0.0	0.0	- 0.1	-10.2
1994	0.0	0.0	0.0	0.0	- 5.0	3.0
1995	0.0	0.0	0.0	0.0	0.0	0.0
1996	0.0	0.0	0.0	0.0	0.0	- 5.0
1997	0.0	0.0	0.0	0.0	0.0	0.0
1998	0.0	0.0	0.0	0.0	0.0	2.0
Standard Three:						
1992	0.0	0.0	0.0	0.0	0.0	0.0
1993	0.0	0.0	0.0	0.0	0.0	-10.1
1994	0.0	0.0	0.0	0.0	0.0	- 2.0
1995	0.0	0.0	0.0	0.0	- 4.9	5.0
1996	0.0	0.0	0.0	0.0	0.0	- 5.0
1997	0.0	0.0	0.0	0.0	0.0	0.0
1998	0.0	0.0	0.0	0.0	0.0	2.0
Standard Four:						
1992	0.0	0.0	0.0	0.0	0.0	0.0
1993	0.0	0.0	0.0	0.0	0.0	- 9.9
1994	0.0	0.0	0.0	0.0	0.0	- 2.0
1995	0.0	0.0	0.0	0.0	0.0	0.0
1996	0.0	0.0	0.0	0.0	- 4.8	- 0.3
1997	0.0	0.0	0.0	0.0	0.0	0.0
1998	0.0	0.0	0.0	0.0	0.0	2.0

TABLE E.9.

Drop-Out Rate Changes,
By Standard, Gender and Scenario (continued)
(Percent Change)

School Year	Scenario 1 Male	Scenario 1 Female	Scenario 2 Male	Scenario 2 Female	Scenario 3 Male	Scenario 3 Female
Standard Five:						
1992	0.0	0.0	0.0	0.0	0.0	0.0
1993	0.0	0.0	0.0	0.0	0.0	- 9.8
1994	0.0	0.0	0.0	0.0	0.0	- 2.0
1995	0.0	0.0	0.0	0.0	0.0	0.0
1996	0.0	0.0	0.0	0.0	0.0	-10.0
1997	0.0	0.0	0.0	0.0	0.0	0.0
1998	0.0	0.0	0.0	0.0	0.0	12.0
Standard Six:						
1992	0.0	0.0	0.0	0.0	0.0	0.0
1993	0.0	0.0	0.0	0.0	0.0	-10.1
1994	0.0	0.0	0.0	0.0	0.0	- 2.0
1995	0.0	0.0	0.0	0.0	0.0	0.0
1996	0.0	0.0	0.0	0.0	0.0	- 5.0
1997	0.0	0.0	0.0	0.0	0.0	0.0
1998	0.0	0.0	0.0	0.0	0.0	12.2
Standard Seven:						
1992	0.0	0.0	0.0	0.0	0.0	0.0
1993	0.0	0.0	0.0	0.0	0.0	0.0
1994	0.0	0.0	0.0	0.0	0.0	- 2.1
1995	0.0	0.0	0.0	0.0	0.0	0.0
1996	0.0	0.0	0.0	0.0	0.0	- 5.0
1997	0.0	0.0	0.0	0.0	0.0	0.0
1998	0.0	0.0	0.0	0.0	0.0	2.0
Standard Eight:						
1992	0.0	0.0	0.0	0.0	0.0	0.0
1993	0.0	0.0	0.0	0.0	0.0	0.0
1994	0.0	0.0	0.0	0.0	0.0	0.0
1995	0.0	0.0	0.0	0.0	0.0	0.0
1996	0.0	0.0	0.0	0.0	0.0	0.0
1997	0.0	0.0	0.0	0.0	0.0	0.0
1998	0.0	0.0	0.0	0.0	0.0	0.0

TABLE E.10.

Initial Values of Quality and Learning Materials Ratios

Item	Value
Students/ClassRoom	86.8:1
Students/Teacher	68.5:1
TextBooks/Student	1.8:1
Exercise Books/Student	2.0:1

The GOM's stated goal for changing these values is to reduce the Students/Teacher and Students/ClassRoom ratios to a value of 60:1 by 1996, and then to 50:1 by the year 2000. Likewise the goal is to provide a full set of three textbooks per student by 1995. Finally, an average of four exercise books are to be provided to each student by 1995. These goals are also supported by GABLE to the extent they are feasible. For defining the scenarios, the desired changes in Table E.11 are used to phase-into these goals.

B.5. Cost Mark-Ups on Learning Materials and Supplies

The last section specified the parameters necessary to determine the quantity of textbooks and exercise books required by the primary education sub-sector. In addition to the supply question, however, there is also a cost question. While Annex 4 to this analysis presents a more detailed discussion of this issue, the basic problem is that the current use of the parastatal operation, Malawi Book Service, as procurement agent for the Ministry of Education and Culture (MOEC) is resulting in significantly higher costs for textbooks, exercise books and other supplies. One element of the GABLE reforms is to allow the MOEC to directly procure these materials and competitively award distribution contracts. These reforms are expected to come into effect for the 1993/94 school year. Table E.12 gives the current mark-up values on the four categories of supplies, as well as the expected change in these mark-ups in 1994 as a result of the change in procurement policies.

TABLE E.11.

Desired Changes in Quality and Learning Materials Ratios, By Year and Scenario (Percent Change)

Item/ Year	Scenario #1	Scenario #2 and Scenario #3
Students/ClassRoom:		
1992	0.0	- 6.2
1993	0.0	- 6.5
1994	0.0	- 7.1
1995	0.0	- 7.5
1996	0.0	- 8.3
1997	0.0	- 4.2
1998	0.0	- 4.3
1999	0.0	- 4.5
2000	0.0	- 4.8
Students/Teacher:		
1992	0.0	- 2.1
1993	0.0	- 3.0
1994	0.0	- 3.1
1995	0.0	- 4.8
1996	0.0	- 0.0
1997	0.0	- 4.2
1998	0.0	- 4.3
1999	0.0	- 4.5
2000	0.0	- 4.8
TextBooks/Student:		
1992	0.0	14.3
1993	0.0	14.3
1994	0.0	12.5
1995	0.0	11.1
Exercise Books/Student:		
1992	0.0	50.0
1993	0.0	0.0
1994	0.0	0.0
1995	0.0	33.3

TABLE E.12.

Delivery-Cost Mark-Up Rates for Learning Materials and Other Supplies and Expected Percentage Change as a Result of Procurement Reforms

Item	Current Mark-Up	Expected Percentage Change in Mark-Up Rate
TextBooks	42.7%	- 57.9%
Exercise Books	99.5%	- 79.9%
Other Student Supplies	20.0%	- 10.0%
Other ClassRoom Supplies	45.7%	- 60.6%

B.6. Teacher Training College Variables

Another key element of the GABLE reforms is to increase the production of teachers through Malawi's Teacher Training Colleges (TTCs) in order to help relieve the teacher shortage implied by the current student/teacher ratio.

These reforms consist of two elements. First, a policy of over-recruitment of students is to be introduced. Currently, approximately 12 percent of the students admitted to the TTCs boarding programs do not matriculate. This results in a 12 percent underenrollment rate, i.e., 12 percent of the available boarding positions remain vacant. Beginning in the 1993/94 school year, the TTCs are to admit ten percent more students than there are boarding places. Thus, given the historical pattern of non-matriculation, the underenrollment rate should be reduced to two percent.

The second element of the TTC reforms is to introduce a day-student program for the three urban Teacher Training Colleges. Currently, only boarding students attend the TTCs. Current enrollments imply a Student/Teacher ratio in the urban TTCs of 16.9:1. Again beginning with the 1993/94 school year, day-students are to be recruited in sufficient volumes to raise the urban TTC Student/Teacher ratio to 24:1.

These changes are only effective in Scenario #3.

B.7. GABLE Tuition and Fee Waiver Program

The final element of the educational scenarios deals with the GOM's tuition waiver for standards one through four and the proposed tuition and school fee waiver program for non-repeating girls. The GOM tuition waiver program forms a part of both Scenario #2 and Scenario #3, while the GABLE waiver program forms a part of Scenario #3 only.

The GOM's tuition policy revision involves the phased implementation of the elimination of tuition for students in standards one through four. The phasing of the program began in school year 1991/1992 for standard one, with an additional standard being added each year until school year 1994/95 when standards one through four will be covered. This phasing describes the coverage of the program. The actual cost of this policy revision is given by the product of the number of students affected and the amount of the tuition being waived (K2.00 per student). The GOM's tuition policy revision does not include other school fees.

Under the GABLE promoted tuition and school fee waiver program for non-repeating girls, a tuition waiver for non-repeating girls in standards two through eight is provided. This tuition waiver is phased with the GOM tuition policy revision. That is, as the GOM waiver of tuition for a given standard is introduced, the GABLE tuition waiver is no longer applicable. The tuition being waived amounts to K2.0 per student in standards two through five, and K4.0 per student in standards six through eight. The second part of this policy is the waiver of non-tuition school fees for non-repeating girls in standards two through eight. These fees amount to K1.5 per student in rural areas and K2.5 per student in urban areas.

IV. Implications for Summary Indicators

To facilitate the discussion of the impacts of the GABLE activity on the primary education sub-sector, a group of indicators were developed. These indicators include measures contributing to the "quality" of the sub-sector, the efficiency of the sub-sector, and access to the sub-sector for females and the overall primary age population.

The "quality" indicators include the actual student/teacher ratio, the actual student/classroom ratio, and the textbooks/student ratio. These three indicators are combined into an index with equal weights on each of the items and based (value of 100) on the 1988/89 school year. An increase of the index indicates an improvement in the sub-sector's "quality."

The measures of efficiency include the time and cost to complete standard four (viewed as providing basic literacy) and standard 8 with each of these items disaggregated by sex. The measures of access include the proportion of females in total enrollment for various standards, and the total enrollment rate for the primary school age population.

These indicators were developed for each of the six scenarios examined, i.e., for both set of population growth rates and each of the educational scenarios. Table E.13 presents the summary indicators for the high population growth scenarios, while Table E.14 presents the summary indicators for the low population growth scenarios. Table E.15 presents a comparison of the six scenarios for selected indicators and two years.

The following sections discuss these indicators. The order of discussion is to consider the two population growth scenarios (high and low population growth rates) separately. For the High Population Growth Scenarios, the individual sets of indicators are discussed with sub-divisions for each of the educational scenarios**4.A similar organization will be used for the discussions in the following sections.
*. Due to the strong similarities between the results of the High and the Low Population Growth Scenarios, the discussion of the Low Population Growth Scenarios is much less detailed. Thus, an outline of the discussion is as follows:

High Population Growth
- "Quality" Indicators
  - Educational Status Quo
  - EFA Objectives without GABLE Reforms
  - EFA Objectives with GABLE Reforms
- Efficiency Indicators
  - Educational Status Quo
  - EFA Objectives without GABLE Reforms
  - EFA Objectives with GABLE Reforms
- Access Indicators
  - Educational Status Quo
  - EFA Objectives without GABLE Reforms
  - EFA Objectives with GABLE Reforms

Low Population Growth
- General discussion of the differences with the previous results for the High Population Growth Scenarios.

A. High Population Growth Scenarios

A.1. "Quality" Indicators

As outlined above, the "quality" indicators used comprise the student/teacher, student/classroom and textbooks/student ratios. While these items are not true indicators of the "quality" of education, they are considered key inputs for primary education which influence quality.

A.1.a. Educational Scenario 1: Maintaining the Status Quo

Under this scenario where all enrollment rates, repetition rates, and drop-out rates remain constant, no changes to the Teacher Training College system are made, and no effort is made to increase classroom space relative to enrollments, the overall quality index still registers an initial moderate improvement. The factor which generates this improvement is an initially declining student/teacher ratio through 1993 (a two percent improvement in this ratio), followed by a large drop in this ratio due to the infusion of teachers through the IBRD sponsored MASTEP Program**5.This program is training roughly 4,500 teaching assistants who, after an apprenticeship period, will become teachers in the lower primary standards.*. The benefits of this teacher infusion are gradually eroded, however, so that

TABLE E.13. Summary Indicators for the Primary Education Sub-Sector
High Population Growth Scenarios
All Educational Scenarios

GABLE Economic Analysis: Maintaining the Status Quo, High Population Growth

Summary Indicators for Primary Education	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Student/Teacher Ratio	68.5	67.4	67.0	66.9	67.0	54.8	55.8	56.8	58.0	59.3	60.6	62.0	63.5	65.0
Index	100.0	101.5	102.2	102.4	102.2	124.9	122.7	120.4	118.0	115.5	113.0	110.4	107.8	105.2
Student/ClassRoom Ratio	86.8	86.8	86.8	86.8	86.8	86.8	86.8	86.8	86.8	86.8	86.8	86.8	86.8	86.8
Index	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Texts/Student	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
Index	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Quality Index	100.0	100.5	100.7	100.8	100.7	108.3	107.6	106.8	106.0	105.2	104.3	103.5	102.6	101.7
Additional Teachers Required for Target	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Time to Complete (Student-Years):														
Standard 4														
Males	10.3	10.5	10.7	10.9	11.2	11.3	11.3	11.4	11.4	11.4	11.4	11.4	11.4	11.4
Females	10.0	10.2	10.4	10.6	10.8	11.0	11.0	11.0	11.0	11.1	11.1	11.1	11.1	11.1
Standard 8	10.7	10.9	11.1	11.3	11.6	11.7	11.7	11.8	11.8	11.8	11.8	11.8	11.8	11.8
Males	21.6	23.0	23.9	24.6	25.2	25.7	26.3	26.9	27.5	27.9	28.2	28.3	28.4	28.5
Females	18.0	19.8	20.9	21.7	22.3	22.8	23.3	23.9	24.4	24.7	25.0	25.1	25.2	25.3
Cost to Complete (Kwacha):	28.6	28.7	29.0	29.4	29.9	30.5	31.1	31.8	32.5	32.9	33.3	33.4	33.6	33.6
Standard 4														
Males	489.9	710.2	572.3	735.1	755.6	859.1	822.6	816.6	809.7	801.3	792.2	782.1	773.5	763.5
Females	476.0	689.3	555.7	713.5	733.9	834.7	799.3	793.5	786.7	778.6	769.8	759.9	751.5	741.9
Standard 8	506.9	735.9	592.7	761.5	782.2	888.9	851.0	844.9	837.7	829.1	819.7	809.2	800.3	790.0
Males	1,021.9	1,550.0	1,278.0	1,653.3	1,703.5	1,958.3	1,909.8	1,936.7	1,957.2	1,964.1	1,958.6	1,943.3	1,927.5	1,908.3
Females	853.8	1,333.3	1,116.4	1,456.3	1,506.6	1,735.1	1,693.3	1,717.9	1,736.3	1,742.5	1,737.7	1,724.0	1,710.0	1,691.2
Female Enrollment/Total Enrollment	1,352.5	1,936.5	1,552.1	1,978.4	2,024.2	2,319.4	2,258.8	2,288.9	2,312.1	2,319.8	2,313.2	2,295.1	2,276.4	2,251.5
Standards 1-3	46.8%	46.8%	46.8%	46.8%	46.8%	46.8%	46.8%	46.8%	46.8%	46.8%	46.8%	46.8%	46.8%	46.8%
Standards 4-6	44.1%	44.1%	44.1%	44.1%	44.2%	44.2%	44.2%	44.2%	44.2%	44.2%	44.2%	44.2%	44.2%	44.2%
Standards 7-8	36.1%	37.6%	38.3%	38.7%	38.9%	39.0%	39.1%	39.1%	39.2%	39.2%	39.2%	39.2%	39.2%	39.2%
Standards 1-8	44.6%	44.9%	45.0%	45.1%	45.2%	45.2%	45.3%	45.3%	45.3%	45.3%	45.3%	45.3%	45.3%	45.3%
Total Enrollment Rate	49.0%	47.8%	47.1%	46.5%	46.1%	45.8%	45.6%	45.4%	45.3%	45.2%	45.2%	45.1%	45.1%	45.1%

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TABLE Economic Analysis: Maintaining the Status Quo, High Population Growth

Summary Indicators for Primary Education	2003	2004	2005	2006
Student/Teacher Ratio	66.7	68.3	70.1	71.9
Index	102.7	100.2	97.7	95.2
Student/ClassRoom Ratio	86.8	86.8	86.8	86.8
Index	100.0	100.0	100.0	100.0
Texts/Student	1.5	1.8	1.8	1.8
Index	100.0	100.0	100.0	100.0
Quality Index	100.9	100.1	99.2	98.4
Additional Teachers Required for Target	0	0	651	1,394
Time to Complete (Student-Years):				
Standard 4	11.4	11.4	11.4	11.4
Males	11.1	11.1	11.1	11.1
Females	11.8	11.8	11.8	11.8
Standard 8	28.5	28.6	28.6	28.7
Males	25.3	25.4	25.4	25.4
Females	33.7	33.8	33.8	33.8
Cost to Complete (Kwacha):				
Standard 4	754.2	745.0	736.0	727.8
Males	732.8	723.8	715.1	707.1
Females	780.4	770.8	761.5	753.0
Standard 8	1,885.2	1,863.4	1,842.1	1,822.8
Males	1,672.4	1,653.0	1,634.1	1,616.9
Females	2,226.6	2,200.9	2,175.9	2,153.1
Female Enrollment/Total Enrollment				
Standards 1-3	46.8%	46.8%	46.8%	46.8%
Standards 4-6	44.2%	44.2%	44.2%	44.2%
Standards 7-8	39.2%	39.2%	39.2%	39.2%
Standards 1-8	45.3%	45.3%	45.3%	45.4%
Total Enrollment Rate	45.0%	45.0%	45.0%	44.9%

GABLE Economic Analysis: EFA Objectives/No Reforms, High Population Growth

Summary Indicators for Primary Education	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Student/Teacher Ratio	68.5	67.4	67.0	67.4	68.6	57.6	60.1	62.4	64.7	66.9	69.1	71.2	73.4	75.5
Index	100.0	101.5	102.2	101.6	99.8	118.9	113.9	109.7	105.8	102.3	99.1	96.1	93.3	90.6
Student/ClaseRoom Ratio	86.8	86.8	86.8	81.4	76.1	70.7	65.4	60.0	57.5	55.0	55.2	57.0	58.7	60.4
Index	100.0	100.0	100.0	106.6	114.0	122.7	132.7	144.6	150.9	157.7	157.0	152.3	147.8	143.6
Texts/Student	1.8	1.8	1.8	2.1	2.4	2.7	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Index	100.0	100.0	100.0	114.3	130.6	146.9	163.3	163.3	163.3	163.3	163.3	163.3	163.3	163.3
Quality Index	100.0	100.5	100.7	107.5	114.8	129.5	136.6	139.2	140.0	141.1	139.8	137.2	134.8	132.5
Additional Teachers Required for Target	0	0	0	101	1,061	0	34	998	3,132	5,486	8,098	11,013	12,266	13,540
Time to Complete (Student-Years):														
Standard 4														
Males	10.3	10.5	10.7	11.0	11.5	12.1	12.5	12.7	12.6	12.3	11.9	11.6	11.5	11.4
Females	10.0	10.2	10.4	10.7	11.2	11.7	12.2	12.4	12.3	11.9	11.5	11.3	11.1	11.1
	10.7	10.9	11.1	11.4	11.9	12.5	13.0	13.2	13.1	12.7	12.3	12.0	11.9	11.8
Standard 8														
Males	21.6	23.0	23.9	24.8	25.8	27.0	28.4	29.6	30.6	31.5	32.0	32.1	31.7	31.0
Females	18.0	19.8	20.9	21.8	22.8	23.9	25.1	26.2	27.1	27.9	28.3	28.4	28.1	27.5
	26.6	28.7	29.0	29.7	30.7	32.1	33.6	35.1	36.3	37.3	37.9	38.0	37.6	36.8
Cost to Complete (Kwacha):														
Standard 4														
Males	489.9	710.2	572.3	1,047.1	1,173.6	1,442.4	1,547.6	1,633.1	1,390.1	1,370.6	1,013.7	812.5	785.6	761.6
Females	476.0	689.3	555.7	1,016.1	1,139.3	1,400.5	1,503.0	1,586.0	1,349.5	1,330.1	983.7	788.8	763.0	739.9
	506.9	735.9	592.7	1,085.0	1,215.5	1,493.6	1,602.1	1,690.7	1,439.7	1,420.3	1,050.5	841.5	813.3	788.2
Standard 8														
Males	1,021.9	1,550.0	1,278.0	2,348.6	2,624.0	3,233.2	3,506.0	3,798.4	3,372.9	3,516.0	2,734.2	2,248.8	2,172.3	2,088.3
Females	853.8	1,333.3	1,116.4	2,068.1	2,318.6	2,880.0	3,102.2	3,361.8	2,985.8	3,112.9	2,420.8	1,990.9	1,922.8	1,828.9
	1,352.5	1,936.5	1,552.1	2,811.6	3,121.4	3,837.0	4,158.9	4,500.7	3,995.0	4,163.2	3,237.3	2,663.2	2,573.9	2,448.9
Female Enrollment/Total Enrollment														
Standards 1-3	46.8%	46.8%	46.8%	46.8%	46.8%	46.8%	46.8%	46.8%	46.8%	46.8%	46.8%	46.8%	46.8%	46.8%
Standards 4-6	44.1%	44.1%	44.1%	44.1%	44.2%	44.2%	44.2%	44.2%	44.2%	44.2%	44.2%	44.2%	44.2%	44.2%
Standards 7-8	36.1%	37.6%	38.3%	38.7%	38.9%	39.0%	39.1%	39.1%	39.2%	39.2%	39.2%	39.2%	39.2%	39.2%
Standards 1-8	44.6%	44.9%	45.0%	45.2%	45.3%	45.3%	45.4%	45.4%	45.4%	45.4%	45.4%	45.4%	45.4%	45.4%
Total Enrollment Rate	49.0%	47.8%	47.1%	46.9%	47.2%	48.1%	49.1%	49.9%	50.5%	51.0%	51.5%	51.8%	52.1%	52.3%

GABLE Economic Analysis: EFA Objectives/No Reforms, High Population Growth

Summary Indicators for Primary Education	2003	2004	2005	2006
Student/Teacher Ratio	77.7	79.8	82.0	84.2
Index	88.1	85.7	83.5	81.3
Student/ClassRoom Ratio	62.2	63.9	65.6	67.4
Index	139.6	135.8	132.3	128.8
Texts/Student	3.0	3.0	3.0	3.0
Index	163.3	163.3	163.3	163.3
Quality Index	130.3	128.3	126.3	124.5
Additional Teachers Required for Target	14,832	16,142	17,479	18,864
Time to Complete (Student-Years):				
Standard 4	11.4	11.4	11.4	11.4
Males	11.1	11.1	11.1	11.1
Females	11.8	11.8	11.8	11.8
Standard 8	30.2	29.6	29.2	29.0
Males	26.8	26.2	25.9	25.7
Females	35.8	35.1	34.5	34.2
Cost to Complete (Kwacha):				
Standard 4	741.4	723.2	706.6	690.7
Males	720.3	702.6	686.6	671.1
Females	767.2	748.3	731.2	714.7
Standard 8	1,962.8	1,874.0	1,804.4	1,748.5
Males	1,737.8	1,660.1	1,599.2	1,550.2
Females	2,325.2	2,218.4	2,134.3	2,066.9
Female Enrollment/Total Enrollment				
Standards 1-3	46.8%	46.8%	46.8%	46.8%
Standards 4-6	44.2%	44.2%	44.2%	44.2%
Standards 7-8	39.2%	39.2%	39.2%	39.2%
Standards 1-8	45.4%	45.4%	45.4%	45.4%
Total Enrollment Rate	52.5%	52.6%	52.6%	52.6%

GABLE Economic Analysis: EFA Objectives/Reforms, High Population Growth

Summary Indicators for Primary Education	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Student/Teacher Ratio	68.5	67.4	67.0	67.4	69.0	58.8	60.6	62.8	65.2	66.9	68.2	69.4	70.6	71.8
Index	100.0	101.5	102.2	101.6	99.2	116.5	112.9	109.1	105.1	102.3	100.4	98.6	96.9	95.3
Student/ClassRoom Ratio	86.8	86.8	86.8	81.4	76.1	70.7	65.4	60.0	57.5	55.0	54.5	55.5	56.5	57.5
Index	100.0	100.0	100.0	106.6	114.0	122.7	132.7	144.6	150.9	157.7	159.0	156.2	153.5	151.0
Texts/Student	1.8	1.8	1.8	2.1	2.4	2.7	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Index	100.0	100.0	100.0	114.3	130.6	146.9	163.3	163.3	163.3	163.3	163.3	163.3	163.3	163.3
Quality Index	100.0	100.5	100.7	107.5	114.6	128.7	136.3	139.0	139.7	141.1	140.9	139.4	137.9	136.5
Additional Teachers Required for Target	0	0	0	101	1,187	0	267	1,166	3,447	5,726	8,067	10,701	11,592	12,473
Time to Complete (Student-Years):														
Standard 4														
Males	10.3	10.5	10.7	11.0	11.7	12.0	12.3	11.8	10.7	9.9	9.2	9.0	9.2	9.3
Females	10.[illegible]	10.2	10.4	10.7	11.2	11.8	12.6	12.4	11.3	10.4	9.1	8.6	8.8	8.9
Standard 8	10.7	10.9	11.1	11.4	12.4	12.2	11.9	11.3	10.0	9.4	9.4	9.5	9.5	9.7
Males	21.6	23.0	23.9	20.9	23.7	18.9	26.7	27.7	27.8	27.6	26.8	25.4	23.8	22.4
Females	18.0	19.8	20.9	18.4	21.1	16.2	23.9	25.1	25.2	25.2	24.5	23.6	21.8	20.0
Cost to Complete (Kwacha):	28.6	28.7	29.0	25.1	27.8	23.5	30.6	31.2	31.4	30.6	29.6	27.5	26.2	25.4
Standard 4														
Males	489.9	710.2	572.3	1,047.1	1,227.7	1,470.0	1,468.9	1,542.1	1,217.3	1,092.5	812.8	660.8	657.1	650.7
Females	476.0	689.3	555.7	1,016.1	1,170.7	1,443.5	1,509.7	1,616.1	1,293.1	1,149.0	800.0	631.3	632.7	624.0
Standard 8	506.9	735.9	592.7	1,085.0	1,297.3	1,499.5	1,427.5	1,469.1	1,145.5	1,038.7	826.6	693.8	683.5	679.3
Males	1,021.9	1,550.0	1,278.0	1,980.8	2,483.0	2,323.3	3,197.4	3,606.4	3,172.4	3,050.3	2,360.4	1,853.6	1,704.1	1,564.7
Females	853.8	1,333.3	1,116.4	1,740.6	2,209.9	1,986.2	2,862.6	3,272.5	2,870.0	2,790.1	2,163.2	1,723.4	1,562.8	1,402.3
Female Enrollment/Total Enrollment	1,352.5	1,936.5	1,552.1	2,379.5	2,903.6	2,878.4	3,674.8	4,087.3	3,581.1	3,385.7	2,612.6	2,012.6	1,880.4	1,776.7
Standards 1-3	46.8%	46.8%	46.8%	46.8%	47.9%	48.4%	48.3%	47.7%	48.2%	48.8%	49.4%	50.0%	50.5%	50.6%
Standards 4-6	44.1%	44.1%	44.1%	44.1%	44.2%	45.4%	46.7%	48.1%	49.0%	48.8%	47.5%	47.3%	47.3%	48.0%
Standards 7-8	36.1%	37.6%	38.3%	38.7%	39.1%	39.7%	42.0%	42.8%	43.7%	45.3%	46.0%	46.2%	45.3%	44.2%
Standards 1-8	44.6%	44.9%	45.0%	45.2%	46.0%	46.8%	47.4%	47.4%	48.0%	48.5%	48.6%	48.9%	49.1%	49.3%
Total Enrollment Rate	49.0%	47.8%	47.1%	46.9%	47.5%	49.1%	50.0%	51.1%	52.4%	53.2%	53.4%	53.6%	53.7%	53.7%

GABLE Economic Analysis: EFA Objectives/Reforms, High Population Growth

Summary Indicators for Primary Education	2003	2004	2005	2006
Student/Teacher Ratio	72.9	74.0	75.3	76.7
Index	93.9	92.4	90.9	89.3
Student/ClassRoom Ratio	58.3	59.2	60.2	61.3
Index	148.7	146.5	144.0	141.4
Texts/Student	3.0	3.0	3.0	3.0
Index	163.3	163.3	163.3	163.3
Quality Index	135.3	134.1	132.7	131.3
Additional Teachers Required for Target	13,340	14,235	15,217	16,309
Time to Complete (Student-Years):				
Standard 4	9.4	9.5	9.5	9.5
Males	9.2	9.4	9.5	9.5
Females	9.6	9.5	9.5	9.5
Standard 8	21.7	21.8	22.1	22.4
Males	19.1	19.2	19.4	20.0
Females	25.3	25.4	25.6	25.5
Cost to Complete (Kwacha):				
Standard 4	644.7	635.1	622.9	609.9
Males	633.2	631.3	621.4	608.8
Females	656.4	638.8	624.5	611.0
Standard 8	1,487.0	1,462.7	1,451.0	1,441.6
Males	1,306.0	1,285.3	1,276.7	1,266.3
Females	1,732.6	1,[illegible]31.0	1,682.8	1,640.6
Female Enrollment/Total Enrollment				
Standards 1-3	50.6%	50.6%	50.6%	50.6%
Standards 4-6	48.8%	49.4%	49.6%	49.7%
Standards 7-8	43.9%	44.2%	44.8%	45.7%
Standards 1-8	49.4%	49.6%	49.8%	49.9%
Total Enrollment Rate	53.5%	53.4%	53.[illegible]%	53.1%

A. High Population Growth Scenarios

A.1. *"Quality" Indicators*

As outlined above, the "quality" indicators used comprise the student/teacher, student/classroom and textbooks/student ratios. While these items are not true indicators of the "quality" of education, they are considered key inputs for primary education which influence quality.

A.1.a. Educational Scenario 1: Maintaining the Status Quo

Under this scenario where all enrollment rates, repetition rates, and drop-out rates remain constant, no changes to the Teacher Training College system are made, and no effort is made to increase classroom space relative to enrollments, the overall quality index still registers an initial moderate improvement. The factor which generates this improvement is an initially declining student/teacher ratio through 1993 (a two percent improvement in this ratio), followed by a large drop in this ratio due to the infusion of teachers through the IBRD sponsored MASTEP Program[5]. The benefits of this teacher infusion are gradually eroded, however, so that by the year 2004 the student/teacher ratio has once again returned to its initial level. Beginning in 2005, the student/teacher ratio begins to rise and a shortage of teachers becomes effective. Similarly, the overall "quality" index falls below it's initial level by the year 2005.

A.1.b. Educational Scenario 2: EFA Objectives Without GABLE Reforms

Once the enrollment rate increases and improvements in the student/teacher, student/classroom and textbooks/student ratios desired under the EFA objectives are factored into the analysis, a significant increase in the overall "quality" index is observed. For example, the overall index for 1995 is 107.6 under the status quo scenario, but reaches 136.6 under the current scenario. This increase is driven by the deliberate policy steps of improving these quality indicators.

Two of the "quality" indicators are unable to fully track the desired targets for the entire time period, i.e., the student/teacher ratio and the student/classroom ratio. Beginning in 1995, the student/teacher ratio begins to exceed to its target values despite the MASTEP infusion of teachers in 1994. Two factors explain this decline in performance. The first factor is the increased enrollment rates which form an integral part of the

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[5] This program is training roughly 4,500 teaching assistants who, after an apprenticeship period, will become teachers in the lower primary standards.

TABLE E.14. Summary Indicators for the Primary Education Sub-Sector
Low Population Growth Scenarios
All Educational Scenarios

GABLE Economic Analysis: Maintaining the Status Quo, Low Population Growth

Summary Indicators for Primary Education	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Student/Teacher Ratio	68.5	67.4	67.0	66.9	67.0	54.8	55.8	56.8	58.0	59.2	60.5	61.9	63.3	64.7
Index	100.0	101.5	102.2	102.4	102.2	124.9	122.7	120.5	118.1	115.6	113.2	110.7	108.2	105.7
Student/ClassRoom Ratio	86.8	86.8	86.8	86.8	86.8	86.8	86.8	86.8	86.8	86.8	86.8	86.8	86.8	86.8
Index	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Texts/Student	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
Index	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Quality Index	100.0	100.5	100.7	100.8	100.7	108.3	107.6	106.8	106.0	105.2	104.4	103.6	102.7	101.9
Additional Teachers Required for Target	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Time to Complete (Student-Years):														
Standard 4														
Males	10.3	10.5	10.7	10.9	11.2	11.3	11.3	11.4	11.4	11.4	11.4	11.4	11.4	11.4
Females	10.0	10.2	10.4	10.6	10.8	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
Standard 8	10.7	10.9	11.1	11.3	11.6	11.7	11.7	11.7	11.8	11.8	11.8	11.8	11.8	11.8
Males	21.6	23.0	23.9	24.6	25.2	25.7	26.3	26.9	27.5	27.9	28.1	28.2	28.3	28.4
Females	18.0	19.8	20.9	21.7	22.3	22.8	23.3	23.9	24.4	24.7	24.9	25.1	25.1	25.2
Cost to Complete (Kwacha)	28.6	28.7	29.0	29.4	29.9	30.5	31.1	31.8	32.4	32.9	33.2	33.4	33.4	33.5
Standard 4														
Males	489.9	710.2	572.3	735.1	755.6	859.1	822.6	815.5	808.0	798.5	788.7	778.2	767.8	757.4
Females	476.0	689.3	555.7	713.5	733.9	834.7	799.3	792.4	785.1	775.9	766.4	756.2	746.1	735.9
Standard 8	506.9	735.9	592.7	761.5	782.2	888.9	851.0	843.8	835.9	826.1	816.0	805.2	794.4	783.6
Males	1,021.9	1,550.0	1,278.0	1,653.3	1,703.5	1,958.3	1,909.8	1,934.3	1,953.5	1,957.8	1,951.0	1,934.6	1,913.7	1,890.0
Females	853.8	1,333.3	1,116.4	1,456.3	1,506.6	1,735.1	1,693.3	1,715.7	1,733.1	1,737.0	1,731.0	1,716.5	1,697.9	1,678.9
Female Enrollment/Total Enrollment	1,352.5	1,936.5	1,552.1	1,978.4	2,024.2	2,319.4	2,258.8	2,286.0	2,307.6	2,312.3	2,304.1	2,284.8	2,260.0	2,232.0
Standards 1-3	46.8%	46.8%	46.8%	46.8%	46.8%	46.8%	46.8%	46.8%	46.8%	46.8%	46.8%	46.8%	46.8%	46.8%
Standards 4-6	44.1%	44.1%	44.1%	44.1%	44.2%	44.2%	44.2%	44.2%	44.2%	44.2%	44.2%	44.2%	44.2%	44.2%
Standards 7-8	36.1%	37.6%	38.3%	38.7%	38.9%	39.0%	39.1%	39.1%	39.2%	39.2%	39.2%	39.2%	39.2%	39.2%
Standards 1-8	44.6%	44.9%	45.0%	45.1%	45.2%	45.2%	45.3%	45.3%	45.3%	45.3%	45.3%	45.3%	45.3%	45.3%
Total Enrollment Rate	49.0%	47.8%	47.1%	46.5%	46.1%	45.8%	45.6%	45.5%	45.4%	45.3%	45.3%	45.2%	45.2%	45.2%

GABLE Economic Analysis: Maintaining the Status Quo, Low Population Growth

Summary Indicators for Primary Education	2003	2004	2005	2006
Student/Teacher Ratio	66.3	67.8	69.4	71.1
Index	103.3	100.9	98.6	96.3
Student/ClassRoom Ratio	86.8	86.8	86.8	86.8
Index	100.0	100.0	100.0	100.0
Texts/Student	1.8	1.8	1.8	1.8
Index	100.0	100.0	100.0	100.0
Quality Index	101.1	100.3	99.5	98.8
Additional Teachers Required for Target	0	0	395	1,073
Time to Complete (Student-Years):				
Standard 4	11.4	11.4	11.4	11.4
Males	11.0	11.0	11.0	11.0
Females	11.8	11.8	11.8	11.8
Standard 8	28.4	28.4	28.4	28.4
Males	25.2	25.2	25.2	25.2
Females	33.5	33.5	33.5	33.5
Cost to Complete (Kwacha):				
Standard 4	747.3	737.3	727.8	718.6
Males	726.1	716.4	707.2	698.3
Females	773.2	762.8	753.0	743.5
Standard 8	1,866.0	1,841.5	1,818.2	1,795.3
Males	1,655.7	1,633.8	1,613.2	1,592.9
Females	2,203.6	2,174.6	2,147.1	2,120.0
Female Enrollment/Total Enrollment				
Standards 1-3	46.8%	46.8%	46.8%	46.8%
Standards 4-6	44.2%	44.2%	44.2%	44.2%	
Standards 7-8	39.2%	39.2%	39.2%	39.2%
Standards 1-8	45.3%	45.3%	45.3%	45.3%
Total Enrollment Rate	45.2%	45.2%	45.2%	45.2%

GABLE Economic Analysis: EFA Objectives/No Reforms, Low Population Growth

Summary Indicators for Primary Education	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Student/Teacher Ratio	68.5	67.4	67.0	67.4	68.6	57.6	60.1	62.4	64.6	66.8	68.9	71.0	73.1	75.2
Index	100.0	101.5	102.2	101.6	99.8	118.9	113.9	109.7	105.9	102.5	99.3	96.4	93.6	91.0
Student/ClassRoom Ratio	86.8	86.8	86.8	81.4	76.1	70.7	65.4	60.0	57.5	55.0	55.1	56.8	58.5	60.1
Index	100.0	100.0	100.0	106.6	114.0	122.7	132.7	144.6	150.9	157.7	157.3	152.7	148.3	144.2
Texts/Student	1.6	1.8	1.8	2.1	2.4	2.7	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Index	100.0	100.0	100.0	114.3	130.6	146.9	163.3	163.3	163.3	163.3	163.3	163.3	163.3	163.3
Quality Index	100.0	100.5	100.7	107.5	114.8	129.5	136.6	139.2	140.0	141.2	140.0	137.4	135.1	132.6
Additional Teachers Required for Target	0	0	0	101	1,061	0	34	992	3,114	5,450	8,037	10,921	12,131	13,352
Time to Complete (Student-Years):														
Standard 4														
Males	10.3	10.5	10.7	11.0	11.5	12.1	12.5	12.7	12.6	12.3	11.8	11.6	11.4	11.4
Females	10.0	10.2	10.4	10.7	11.2	11.7	12.2	12.3	12.3	11.9	11.5	11.2	11.1	11.1
Standard 8	10.7	10.9	11.1	11.4	11.9	12.5	13.0	13.2	13.1	12.7	12.3	12.0	11.8	11.8
Males	21.6	23.0	23.9	24.8	25.8	27.0	28.4	29.6	30.6	31.4	31.9	32.0	31.6	30.9
Females	18.0	19.8	20.9	21.8	22.8	23.9	25.1	26.2	27.1	27.8	28.3	28.3	28.0	27.3
Cost to Complete (Kwacha):	28.6	28.7	29.0	29.7	30.7	32.1	33.6	35.0	36.3	37.2	37.8	37.9	37.5	36.6
Standard 4														
Males	489.9	710.2	572.3	1,047.1	1,173.6	1,442.4	1,547.6	1,631.4	1,386.8	1,365.8	1,019.7	811.2	784.7	760.8
Females	476.0	689.3	555.7	1,016.1	1,139.3	1,400.5	1,503.0	1,584.3	1,346.3	1,325.4	989.5	787.6	762.1	739.1
Standard 8	506.9	735.9	592.7	1,085.0	1,215.5	1,493.6	1,602.1	1,688.9	1,436.3	1,415.3	1,056.6	840.2	812.2	787.3
Males	1,021.9	1,550.0	1,278.0	2,348.6	2,624.0	3,233.2	3,506.0	3,794.7	3,365.6	3,505.0	2,751.8	2,246.2	2,169.8	2,063.0
Females	853.8	1,333.3	1,116.4	2,068.1	2,318.6	2,860.0	3,102.2	3,358.6	2,979.4	3,103.2	2,436.5	1,988.8	1,920.7	1,826.2
Female Enrollment/Total Enrollment	1,352.5	1,936.5	1,552.1	2,811.6	3,121.4	3,837.0	4,156.9	4,498.3	3,986.2	4,149.9	3,257.9	2,660.0	2,570.6	2,444.7
Standards 1-3	46.8%	46.8%	46.8%	46.8%	46.8%	46.8%	46.8%	46.8%	46.8%	46.8%	46.8%	46.8%	46.8%	46.8%
Standards 4-6	44.1%	44.1%	44.1%	44.1%	44.2%	44.2%	44.2%	44.2%	44.2%	44.2%	44.2%	44.2%	44.2%	44.2%
Standards 7-8	36.1%	37.6%	38.3%	38.7%	38.9%	39.0%	39.1%	39.1%	39.2%	39.2%	39.2%	39.2%	39.2%	39.2%
Standards 1-8	44.6%	44.9%	45.0%	45.2%	45.3%	45.3%	45.4%	45.4%	45.4%	45.4%	45.4%	45.4%	45.4%	45.4%
Total Enrollment Rate	49.0%	47.8%	47.1%	46.9%	47.2%	48.1%	49.1%	49.9%	50.6%	51.1%	51.6%	52.0%	52.3%	52.5%

GABLE Economic Analysis. EFA Objectives/No Reforms, Low Population Growth

Summary Indicators for Primary Education	2003	2004	2005	2006
Student/Teacher Ratio	77.2	79.2	81.2	83.3
Index	88.6	86.4	84.3	82.2
Student/ClassRoom Ratio	61.8	63.4	65.0	66.6
Index	140.4	136.9	133.5	130.2
Texts/Student	3.0	3.0	3.0	3.0
Index	163.3	[illegible]	163.3	163.3
Quality Index	130.8	128.8	127.0	125.2
Additional Teachers Required for Target	14,579	15,815	17,068	18,349
Time to Complete (Student-Years):				
Standard 4	11.4	11.4	11.4	11.4
Males	11.0	11.0	11.0	11.0
Females	11.8	11.8	11.8	11.8
Standard 8	30.1	29.4	29.0	28.7
Males	26.6	26.1	25.7	25.4
Females	35.6	34.8	34.2	33.9
Cost to Complete (Kwacha):				
Standard 4	740.7	722.6	706.4	690.8
Males	719.7	702.1	686.3	671.3
Females	766.4	747.6	730.8	714.8
Standard 8	1,958.9	1,869.8	1,800.2	1,744.2
Males	1,734.5	1,656.6	1,595.8	1,546.8
Females	2,320.2	2,212.9	2,128.7	2,061.2
Female Enrollment/Total Enrollment				
Standards 1-3	46.8%	46.8%	46.8%	46.8%
Standards 4-6	44.2%	44.2%	44.2%	44.2%
Standards 7-8	39.2%	39.2%	39.2%	39.2%
Standards 1-8	45.4%	45.4%	45.3%	45.3%
Total Enrollment Rate	52.7%	52.8%	52.9%	53.0%

GABLE Economic Analysis: EFA Objectives/Reforms, Low Population Growth

Summary Indicators for Primary Education	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Student/Teacher Ratio	68.5	67.4	67.0	67.4	69.0	58.8	60.6	62.7	65.1	66.8	68.1	69.2	70.4	71.5
Index	100.0	101.5	102.2	101.6	99.2	115.5	112.9	109.1	105.1	102.4	100.6	98.9	97.2	95.8
Student/ClassRoom Ratio	86.8	86.8	86.8	81.4	76.1	70.7	65.4	60.0	57.5	55.0	54.4	55.4	56.3	57.2
Index	100.0	100.0	100.0	106.6	114.0	122.7	132.7	144.6	150.9	157.7	159.3	156.6	154.1	151.8
Texts/Student	1.8	1.8	1.8	2.1	2.4	2.7	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Index	100.0	100.0	100.0	114.3	130.6	146.9	163.3	163.3	163.3	163.3	163.3	163.3	163.3	163.3
Quality Index	100.0	100.5	100.7	107.5	114.6	128.7	136.3	139.0	139.6	141.1	141.1	139.6	138.2	136.9
Additional Teachers Required for Target	0	0	0	101	1,187	0	267	1,160	3,427	5,686	8,001	10,600	11,446	12,269
Time to Complete (Student-Years):														
Standard 4														
Males	10.3	10.5	10.7	11.0	11.7	12.0	12.3	11.8	10.7	9.9	9.2	9.0	9.1	9.3
Females	10.0	10.2	10.4	10.7	11.2	11.8	12.6	12.4	11.3	10.4	9.0	8.6	8.8	8.9
Standard 8	10.7	10.9	11.1	11.4	12.4	12.2	11.9	11.3	10.0	9.4	9.3	9.5	9.5	9.7
Males	21.6	23.0	23.9	20.9	23.7	18.9	26.7	27.7	27.8	27.6	26.7	25.3	23.7	22.2
Females	18.0	19.8	20.9	18.4	21.1	16.2	23.9	25.1	25.2	25.2	24.5	23.5	21.7	19.9
Cost to Complete (Kwacha):	28.6	28.7	29.0	25.1	27.8	23.5	30.6	31.2	31.4	30.6	29.6	27.5	26.1	25.2
Standard 4														
Males	489.9	710.2	572.3	1,047.1	1,227.7	1,470.0	1,468.9	1,540.6	1,214.2	1,088.5	817.8	660.0	656.6	650.4
Females	476.0	689.3	555.7	1,016.1	1,170.7	1,443.5	1,509.7	1,614.5	1,289.9	1,144.8	805.0	630.5	632.2	623.7
Standard 8	506.9	735.9	592.7	1,085.0	1,297.3	1,499.5	1,427.5	1,467.6	1,142.6	1,034.8	831.6	692.9	683.0	679.1
Males	1,021.9	1,550.0	1,278.0	1,980.8	2,483.0	2,323.3	3,197.4	3,603.1	3,165.1	3,040.1	2,376.3	1,851.7	1,702.4	1,562.6
Females	853.8	1,333.3	1,116.4	1,740.8	2,209.9	1,986.2	2,862.6	3,269.5	2,863.5	2,781.0	2,177.9	1,721.8	1,561.4	1,400.6
Female Enrollment/Total Enrollment	1,352.5	1,936.5	1,552.1	2,379.5	2,903.6	2,878.4	3,674.8	4,063.4	3,572.6	3,374.1	2,630.0	2,010.4	1,878.3	1,774.0
Standards 1-3	46.8%	46.8%	46.8%	46.8%	47.9%	48.4%	48.3%	47.7%	48.2%	48.8%	49.4%	50.0%	50.5%	50.6%
Standards 4-6	44.1%	44.1%	44.1%	44.1%	44.2%	45.4%	46.7%	48.1%	49.0%	48.8%	47.5%	47.3%	47.3%	48.0%
Standards 7-8	36.1%	37.6%	38.3%	38.7%	39.1%	39.7%	42.0%	42.8%	43.7%	45.3%	46.0%	46.2%	45.3%	44.2%
Standards 1-8	44.6%	44.9%	45.0%	45.2%	46.0%	46.8%	47.4%	47.4%	48.0%	48.5%	48.6%	48.9%	49.1%	49.2%
Total Enrollment Rate	49.0%	47.8%	47.1%	46.9%	47.5%	49.1%	50.0%	51.2%	52.5%	53.3%	53.5%	53.7%	53.9%	53.9%

GABLE Economic Analysis: EFA Objectives/Reforms, Low Population Growth

Summary Indicators for Primary Education	2003	2004	2005	2006
Student/Teacher Ratio	72.5	73.5	74.6	75.8
Index	94.5	93.2	91.8	90.3
Student/ClassRoom Ratio	58.0	58.8	59.6	60.6
Index	149.7	147.6	145.5	143.1
Texts/Student	3.0	3.0	3.0	3.0
Index	163.3	163.3	163.3	163.3
Quality Index	135.8	134.7	133.5	132.2
Additional Teachers Required for Target	13,067	13,883	14,775	15,757
Time to Complete (Student-Years):				
Standard 4				
Males	9.4	9.4	9.4	9.4
Females	9.2	9.4	9.4	9.4
	9.5	9.5	9.4	9.4
Standard 8				
Males	21.6	21.6	21.9	22.2
Females	18.9	19.0	19.3	19.8
	25.1	25.2	25.4	25.3
Cost to Complete (Kwacha):				
Standard 4				
Males	644.7	635.2	623.6	611.1
Females	633.2	631.4	622.0	610.0
	656.4	638.9	625.1	612.2
Standard 8				
Males	1,484.8	1,460.8	1,449.7	1,440.8
Females	1,304.3	1,283.8	1,275.7	1,285.7
	1,729.9	1,698.8	1,681.3	1,639.5
Female Enrollment/Total Enrollment				
Standards 1-3	50.6%	50.6%	50.6%	50.6%
Standards 4-6	48.8%	49.4%	49.6%	49.7%
Standards 7-8	43.9%	44.2%	44.8%	45.7%
Standards 1-8	49.4%	49.6%	49.8%	49.9%
Total Enrollment Rate	53.8%	53.6%	53.5%	53.4%

by the year 2004 the student/teacher ratio has once again returned to its initial level. Beginning in 2005, the student/teacher ratio begins to rise and a shortage of teachers becomes effective. Similarly, the overall "quality" index falls below it's initial level by the year 2005.

A.1.b. Educational Scenario 2: EFA Objectives Without GABLE Reforms

Once the enrollment rate increases and improvements in the student/teacher, student/classroom and textbooks/student ratios desired under the EFA objectives are factored into the analysis, a significant increase in the overall "quality" index is observed. For example, the overall index for 1995 is 107.6 under the status quo scenario, but reaches 136.6 under the current scenario. This increase is driven by the deliberate policy steps of improving these quality indicators.

Two of the "quality" indicators are unable to fully track the desired targets for the entire time period, i.e., the student/teacher ratio and the student/classroom ratio. Beginning in 1995, the student/teacher ratio begins to exceed to its target values despite the MASTEP infusion of teachers in 1994. Two factors explain this decline in performance. The first factor is the increased enrollment rates which form an integral part of the GOM's objectives. Even though the increase in standard one enrollment rates only amounts to a 2.1 percentage point increase, this is sufficient to overwhelm the limited production capacity of the Teacher Training College system. As a result, a teacher shortage quickly develops when the actual supply is compared to that needed to reach the target levels. By 1997 an addition 3,130 teachers would be required to meet the teacher/student ratio of 57.5:1, by 2000 and 2005 this figure increases to 11,000 and 17,500, respectively.

While the student/classroom target could be met by continuing to spend money for the construction of classrooms, the analytical model used for these projections includes a "construction brake" based on a lower limit of 0.8 teachers/classroom. Thus, the teacher shortage discussed above results in a slow down in classroom construction beginning in 1992. As a result, the student/classroom ratio begins to rise from 55:1 in 1998 to 64:1 in 2005.

A.1.c. Educational Scenario 3: EFA Objectives With GABLE Reforms

When the effects of the GABLE supported reforms are included with the EFA objectives, the quality indicators show a distinct improvement for the post-1998 period when compared to the results of scenario 2 (EFA Objectives without the GABLE Reforms). Prior to 1998, the quality indicators track fairly closely across the two scenarios. Nevertheless, the decline in the overall index beginning in 1999 is also observed under this scenario. The relative improvement in this scenario compared to scenario 2 occurs despite the higher standard one and total

enrollment rates that result from these reforms. For example, the overall quality indicator for the year 2000 under the no reforms scenario is 137.2, while under the reforms scenario the index equals 139.4. By the year 2005, these indices have declined to 126.3 and 132.7, respectively.

The reason for this relative improvement under this scenario compared to the no reform scenario is the increased production of teachers through the modest reforms of the Teacher Training College system. The introduction of the policy of over-recruitment and the day-student program results in a reduction of the teacher shortage discussed above. For example, the teacher shortage in the year 2005 under the no reforms scenario totals 17,500 while under the reforms scenario the shortage is only 15,220--a 13 percent reduction.

Through the increased production of teachers, this scenario is able to achieve a greater reduction in the student/classroom ratio than was possible under the no reforms scenario. For example, the student/classroom ratio in 2005 is 65.6:1 under the no reforms scenario while it equals 60.2:1 under the reforms scenario.

TABLE E.15.

Comparison of Selected Indicators for the Six Scenarios for the Years 1996 and 2005

Rates	High Population Growth					
	Low Population Growth Rates					
	Scenario 1		Scenario 2		Scenario 3	
Indicator	Scenario 1		Scenario 2		Scenario 3	
	1996	2005	1996	2005	1996	2005
Quality Index	106.8	99.2	139.2	126.3	139.0	132.7
	106.8	99.5	139.2	127.0	139.0	133.5
Time to Complete						
Standard 4	11.4	11.4	12.7	11.4	11.8	9.5
	11.4	11.4	12.7	11.4	11.8	9.4
Standard 8	26.9	28.6	29.6	29.2	27.7	22.1
	26.9	28.4	29.6	29.0	27.7	21.9
Cost to Complete						
Standard 4	817	736	1633	707	1542	623
	816	728	1631	706	1541	624
Standard 8	1937	1842	3798	1804	3606	1451
	1934	1818	3794	1800	3603	1450
Total Enrollment Rate	45.4	45.0	49.9	52.6	51.1	53.2
	45.4	45.2	49.9	52.9	51.2	53.5
Female Participation Rate	45.3	45.3	45.4	45.4	47.4	49.8
	45.3	45.4	45.3	47.4	47.4	49.8

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Taken together these two relative improvements account for the improved relative performance of the overall "quality" index. While this "quality" index declines in the post-1998 period under each of these scenarios, both of the scenarios represent a significant improvement over the status quo scenario. In 2005, for example, the status quo "quality" index equals 99.2 while it equals 126.3 under the no reforms scenario, and 132.7 under the reforms scenario.

In addition to documenting the relative degree of educational quality enhancing inputs to be expected, this analysis has clearly shown that the binding constraint on future improvements in the "quality" and availability of primary education will be the number of teachers available. Thus, future educational activities should place a significant emphasis on easing this constraint.

A.2. Efficiency Indicators

Four efficiency indicators are used. The first two, the time to complete standards four and eight, measure the student-years required to produce a "graduate" of the relevant standard. These measures are derived by dividing the total enrollment in all standards up to and including the standard for the graduation by the number of "graduates" from the given standard. Thus, the time to complete standard eight is the total primary enrollment (standards one through eight) divided by the number of standard eight graduates. The basic determinants of this indicator are the repetition and drop-out rates for all standards.

The last two efficiency measures, the cost to complete standards four and eight, equal the product of the time to complete those standards and primary education's cost per student-year. Thus, changes in these measures result from the combined changes in the time to complete and the overall cost per student-year.

A.2.a. Educational Scenario 1: Maintaining the Status Quo

With no changes in the basic structure of primary education, the efficiency indicators considered in the analysis show a gradual worsening in terms of time and cost for completing both standard four and standard eight, but especially for standard eight.

Under this scenario there is an initial gradual worsening of the various efficiency indicators for standard 4 followed by their reaching a steady state by 1996. The time to complete standard 4 rises from 10.3 student years in 1989 to 11.4 student-years in 1996. Due to the infusion of teachers (resulting in an increase in personnel costs) through the MASTEP program in 1994, the cost to complete standard four increases from K755.6 ($261) in 1993 to K859.1 ($296) in 1994. Thereafter, the cost to complete standard four decreases steadily to K736 ($254) in 2005 as the general costs get spread across a larger student body.

The time to complete standard eight shows a continuing increase from 21.6 student-years in 1989 up to 28.6 student-years in 2005. The cost to complete standard eight rises from K1,703 ($587) in 1993 to K1,964 ($677) in 1998, then begins to decline reaching K1,842 ($635) in 2005.

A.2.b. Educational Scenario 2: EFA Objectives Without GABLE Reforms

Given the absence of policy changes to affect the repetition and drop-out rates under this scenario, there are no basic reasons for changes in the time to complete measures; however, due to the increased enrollment rates which begin in 1992, there is a temporary increase in the time to complete any given standard until the increased enrollments have had a chance to work their way upward in the system**6.The reason for this temporary increase derives from the way these measures are calculated, i.e., the ratio of total enrollment up to and including the standard of completion divided the number completing that standard. Thus, an initial increase in enrollments will increase the numerator of this relationship with no effect on the denominator until the increased enrollments have had a chance to work up to the standard for which the time to complete is being measured.

*. For standard four this temporary increase in the time to complete occurs in the years 1992 through 2001. For standard eight, this temporary increase begins in 1992 and is not quite eliminated by 2006.

Given the increased construction and teacher costs associated with the GOM's goals and the lack of efficiency improvements in terms of the time to complete, it is not surprising that the cost to complete both standard four and standard eight increases substantially in this scenario compared to the status quo scenario. In 1995, for example, the cost to produce a standard four graduate is K1,633 under this scenario compared to K817 under the status quo scenario, a 100% increase. The costs for a standard eight graduate in 1996 are K3,798 and K1,937, respectively, again almost a 100 percent increase. In later years, as construction costs are reduced due to the teacher shortage and the times to complete have returned to its original level, this cost differential is essentially eliminated.

A.2.c. Educational Scenario 3: EFA Objectives With GABLE Reforms

Under this scenario repetition and drop-out rates are reduced over the 1993 through 1998 school years and enrollment rates increase slightly for female students due to the GABLE reforms. The net results of these changes is a significant reduction in the time and cost required to produce a graduate of both standards four and eight. As early as 1996 these efficiency improvements become evident. The time needed to complete standard four falls from 12.7 student-years in the no reforms scenario to 11.8 student-years under the current scenario (a

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seven percent reduction), while the time needed to complete standard eight is reduced from 29.6 student-years to 27.8 student-years (a six percent reduction). By 2005, the time to produce a standard four graduate is reduced by 16.7 percent under the reform scenario compared to the no reform scenario, while a 24.3 percent reduction is realized for standard eight graduates.

These efficiency improvements in terms of the time required to complete standards four and eight are also reflected in the costs to produce graduates. By 1996, the cost to complete standard four is reduced by 5.6 percent, while the cost to complete standard eight is reduced by a little more than five percent. By 2005 these cost reductions are expected to increase to 11.8 percent and 19.6 percent, respectively.

A.3. Access Indicators

The access indicator considered for global access is the total enrollment rate, i.e., total primary enrollment as a percent of the primary school age population. For female access, the proportion of females relative to total enrollment is examined for standards one through three, four through six, seven and eight, and finally for the total primary education sub-sector, i.e., standards one through eight.

A.3.a. Educational Scenario 1: Maintaining the Status Quo

Little if any changes in general access occurs under this scenario. The total enrollment rate actually declines from 49 percent in 1989 to roughly 45 percent by the year 2000. Female participation remains constant at 47 percent for standards one through three and 44 percent for standards four through six, but shows a slight increase in standards seven and eight over the projection period. As a result, there is a very slight (0.7 percentage point) increase in total female participation in the primary education sub-sector.

A.3.b. Educational Scenario 2: EFA Objectives Without GABLE Reforms

The increased standard one enrollment rates expected under the GOM's EFA objectives results in 7.5 percentage point increase in the total enrollment rate from approximately 45 percent under the status quo scenario to approximate 52.5 percent under the current scenario by the year 2005. These enrollment rates remain far below the stated goal of 75 percent by this time period. Given the significant shortage of teachers that results from this modest enrollment increase, it is clear that the achievement of the 75 percent total enrollment rate by the year 2000 is not feasible without further significant, and costly, efforts.

Given the lack of any significant differential effects between males and females under this scenario, the relative female access measures show little or no variation from those under the status quo scenario.

A.3.c. Educational Scenario 3: EFA Objectives With GABLE Reforms

The increased enrollment rates for females, along with the reduced drop-out rates, resulting from the GABLE specific policy changes results in a slight increase of one to two percentage points in the total enrollment rate compared to the no reform scenario. The resulting total enrollment rate of roughly 53 percent in 2005 remains significantly below the overall EFA goal.

Overall female participation in primary education is significantly increased under this scenario. By 1996, the proportion of females in all primary standards is expected to increase from 45.4 percent under the no reforms scenario to 47.4 percent under the reform scenario. This increase is expected to continue through the later years reaching almost 50 percent, compared to 45.4 percent under the no reforms scenario, by the year 2005.

B. Low Population Growth Scenarios

As noted above in the introduction to this section, the basic results of the low population growth scenarios are remarkably similar to the results of the high population growth scenarios. In terms of the "quality" indicators, the basic differences are a smaller deterioration in these indicators in the years after 1998 under the second and third scenarios. The basic reason for this difference is the smaller number of students which are entering the education system as a result of the slower increase in the primary school age population. This lower student load implies that the teacher shortage is slightly reduced and hence the "construction brake" comes into effect slightly later so that the student/teacher and student/classroom ratios do not begin increasing as early as under the high population growth scenarios. By the year 2005, the overall quality index is roughly 0.7 or 0.8 index points higher than under the high population growth scenarios.

For the efficiency measures, the differences between the high and low population growth scenarios are even smaller with a gain of roughly 0.1 to 0.2 student-years in the time to complete either standards four or eight. The cost to complete figures only show a difference of one to two kwacha in these cases.

Finally, the Total Enrollment Rates and the female participation rates are virtually identical in these scenarios.

V. Implications for the Government of Malawi Budget

One of the principal issues for this analysis is the budgetary implications of the GOM's efforts to improve the primary education system. This section summarizes the results and implications of the analysis of the budgetary needs for the total education sector, and the primary education sub-sector**7.For a detailed discussion of the methodology used to generate these budgetary requirements, see Annex 1 to this analysis.

*. Of particular concern is the proportion of total budgetary expenditures needed for the education sector, and then primary education's share of these resources. As in the previous section, a detailed discussion of the results for the educational scenarios is presented for the high population growth scenario, followed by a brief discussion of the differences for the low population growth scenarios. Table E.16 presents the detailed results of the analysis for the high population growth scenarios, while Table E.17 presents the results for the low population growth scenarios.

Throughout the tables in this section, data presented for the years 1989 through 1991 are based on actual expenditures or the current GOM budget figures. During these years, the GOM has spent from 12 percent to 14 percent of its total budgetary expenditures on education. Of these funds, roughly 40 percent went to primary education in 1989 and 1991, with almost 45 percent going to primary education in 1990. For the post-1991 figures, the budgetary needs are generated by estimates of the costs of associated with meeting the primary education goals as defined in the analytical scenarios discussed above. Estimates of the remaining education budget are based on maintaining real per capita expenditures constant.

General macroeconomic sustainability is built into these estimates by setting a sustainable budgetary deficit (before grants) of roughly six percent of GDP. Real GDP is assumed to grow at an annual rate of 4.5 percent which implies that total government expenditures are also growing at a real rate of 4.5 percent per annum.

The basic conclusion of this analysis is that roughly 19 percent of total budgetary expenditures are required by the education sector. In addition, approximately 63 percent of these resources need to be allocated to primary education. While the projections presented below indicate a decline in resource requirements for education and primary education, this is generated by the shortage of teachers resulting from Malawi's inadequate teacher production capacity and the desired increase in enrollments. Thus, if the GOM's stated objectives are to be met and additional teachers are available, the above estimates of budgetary requirements would continue to be valid.

TABLE E.19. Population Growth Implications from Educational Effects on Fertility and Child Survival
Low Population Growth Scenarios
All Educational Scenarios

GABLE Economic Analysis: Maintaining the Status Quo, Low Population Growth

Female Population, Aged 15+ (Thousands)	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Total	2,121.7	2,194.9	2,280.7	2,379.6	2,491.7	2,616.7	2,754.2	2,903.6	3,064.5	3,236.3	3,418.6	3,611.1	3,813.5	4,025.6
No Schooling	1,252.3	1,302.7	1,356.3	1,412.7	1,471.8	1,533.6	1,598.0	1,665.0	1,734.5	1,806.6	1,881.3	1,958.7	2,038.9	2,121.9
Standards 1-3	263.5	276.3	289.1	304.6	324.4	349.6	380.8	418.0	461.5	511.0	566.5	627.6	694.1	765.9
Standards 4-6	311.4	314.6	321.5	331.3	343.6	357.7	373.4	390.5	408.8	428.2	448.5	469.7	491.7	514.6
Standard 7 or Above	294.[illegible]	301.3	313.8	331.0	351.9	375.8	402.0	430.1	459.7	490.5	522.3	555.1	588.7	623.2
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
No Schooling	59.0%	59.4%	59.5%	59.4%	59.1%	58.6%	58.0%	57.3%	56.6%	55.8%	55.0%	54.2%	53.5%	52.7%
Standards 1-3	12.4%	12.6%	12.7%	12.8%	13.0%	13.4%	13.8%	14.4%	15.1%	15.8%	16.6%	17.4%	18.2%	19.0%
Standards 4-6	14.7%	14.3%	14.1%	13.9%	13.8%	13.7%	13.6%	13.4%	13.3%	13.2%	13.1%	13.0%	12.9%	12.8%
Standard 7 or Above	13.9%	13.7%	13.8%	13.9%	14.1%	14.4%	14.6%	14.8%	15.0%	15.2%	15.3%	15.4%	15.4%	15.5%
Estimated Long-Run Growth Rate by Educational Levels:														
No Schooling	4.47%													
Standards 1-3	3.93%													
Standards 4-6	3.40%													
Standard 7 or Above	2.77%													
Weighted Average Population Growth Rate:	4.01%	4.02%	4.02%	4.02%	4.01%	4.01%	4.00%	4.00%	3.99%	3.99%	3.98%	3.98%	3.97%	3.97%

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GABLE Economic Analysis: Maintaining the Status Quo, Low Population Growth

Female Population, Aged 15+ (Thousands)	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Total	4,247.3	4,478.5	4,719.2	4,969.5	5,229.3	5,498.7	5,778.0	6,067.1	6,366.2	6,675.5	6,995.2	7,325.5	7,666.4
No Schooling	2,207.9	2,296.9	2,389.2	2,484.7	2,583.7	2,686.3	2,792.5	2,902.5	3,016.4	3,134.2	3,256.2	3,382.3	3,512.7
Standards 1-3	842.7	924.3	1,010.7	1,101.5	1,196.8	1,296.5	1,400.4	1,508.6	1,621.0	1,737.6	1,858.4	1,983.4	2,112.5
Standards 4-6	536.2	562.5	587.6	613.5	640.1	667.4	695.5	724.4	754.1	784.7	816.2	848.6	882.1
Standard 7 or Above	658.5	694.7	731.7	769.7	808.7	848.6	889.5	931.5	974.7	1,018.9	1,064.4	1,111.1	1,159.2
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
No Schooling	52.0%	51.3%	50.6%	50.0%	49.4%	48.9%	48.3%	47.8%	47.4%	47.0%	46.5%	46.2%	45.8%
Standards 1-3	19.8%	20.6%	21.4%	22.2%	22.9%	23.6%	24.2%	24.9%	25.5%	26.0%	26.6%	27.1%	27.6%
Standards 4-6	12.7%	12.6%	12.5%	12.3%	12.2%	12.1%	12.0%	11.9%	11.8%	11.8%	11.7%	11.6%	11.5%
Standard 7 or Above	15.5%	15.5%	15.5%	15.5%	15.5%	15.4%	15.4%	15.4%	15.3%	15.3%	15.2%	15.2%	15.1%
Estimated Long-Run Growth Rate by Education													
No Schooling													
Standards 1-3													
Standards 4-6													
Standard 7 or Above													
Weighted Average Population Growth Rate:	3.96%	3.96%	3.96%	3.95%	3.95%	3.95%	3.95%	3.95%	3.95%	3.94%	3.94%	3.94%	3.94%

GABLE Economic Analysis: EFA Objectives/No Reforms, Low Population Growth

Female Population, Aged 15+ (Thousands)	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Total	2,121.7	2,194.9	2,260.7	2,379.6	2,491.3	2,614.9	2,749.5	2,894.8	3,051.0	3,218.1	3,396.3	3,585.6	3,786.0	3,997.5
No Schooling	1,252.3	1,302.7	1,356.3	1,412.7	1,471.4	1,531.7	1,592.9	1,654.9	1,718.0	1,782.3	1,848.1	1,915.5	1,984.7	2,055.7
Standards 1-3	263.5	276.3	289.1	304.6	324.4	349.7	381.1	419.2	464.3	516.6	576.1	642.6	716.1	798.2
Standards 4-6	311.4	314.6	321.5	331.3	343.6	357.7	373.4	390.6	409.0	428.7	449.7	472.3	498.3	521.8
Standard 7 or Above	294.4	301.3	313.8	331.0	351.9	375.8	402.0	430.1	459.7	490.5	522.3	555.1	588.9	623.8
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
No Schooling	59.0%	59.4%	59.5%	59.4%	59.1%	58.6%	57.9%	57.2%	56.3%	55.4%	54.4%	53.4%	52.4%	51.4%
Standards 1-3	12.4%	12.6%	12.7%	12.8%	13.0%	13.4%	13.9%	14.5%	15.2%	16.1%	17.0%	17.9%	18.9%	19.9%
Standards 4-6	14.7%	14.3%	14.1%	13.9%	13.8%	13.7%	13.6%	13.5%	13.4%	13.3%	13.2%	13.2%	13.1%	13.1%
Standard 7 or Above	13.9%	13.7%	13.8%	13.9%	14.1%	14.4%	14.6%	14.9%	15.1%	15.2%	15.4%	15.5%	15.6%	15.6%
Estimated Long-Run Growth Rate by Education al Levels:														
No Schooling	4.47%													
Standards 1-3	3.93%													
Standards 4-6	3.40%													
Standard 7 or Above	2.77%													
Weighted Average Population Growth Rate:	4.01%	4.02%	4.02%	4.02%	4.01%	4.01%	4.00%	3.99%	3.99%	3.98%	3.98%	3.97%	3.96%	3.96%

GABLE Economic Analysis: EFA Objectives/No Reforms, Low Population Growth

Female Population, Aged 15+ (Thousands)	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Total	4,220.3	4,454.4	4,699.9	4,956.9	5,225.3	5,505.1	5,796.3	6,098.9	6,412.9	6,738.4	7,075.4	7,424.1	7,784.7
No Schooling	2,128.8	2,204.2	2,282.0	2,362.5	2,445.8	2,532.0	2,621.3	2,713.9	2,809.7	2,908.9	3,011.6	3,117.9	3,227.8
Standards 1-3	882.8	975.6	1,074.3	1,178.9	1,289.2	1,404.9	1,526.0	1,652.4	1,784.1	1,921.0	2,063.0	2,210.2	2,362.5
Standards 4-6	548.6	576.7	606.0	636.4	668.0	700.6	734.4	769.[illegible]	805.2	842.3	880.6	920.1	960.8
Standard 7 or Above	660.1	697.9	737.6	779.1	822.4	867.6	914.6	963.4	1,013.9	1,066.2	1,120.2	1,176.0	1,233.6
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
No Schooling	50.4%	49.5%	48.6%	47.7%	46.8%	46.0%	45.2%	44.5%	43.8%	43.2%	42.6%	42.0%	41.5%
Standards 1-3	20.9%	21.9%	22.9%	23.8%	24.7%	25.5%	26.3%	27.1%	27.8%	28.5%	29.2%	29.8%	30.3%
Standards 4-6	13.0%	12.9%	12.9%	12.8%	12.8%	12.7%	12.7%	12.6%	12.6%	12.5%	12.4%	12.4%	12.3%
Standard 7 or Above	15.6%	15.7%	13.7%	15.7%	15.7%	15.8%	15.8%	15.8%	15.8%	15.8%	15.8%	15.8%	15.8%
Estimated Long-Run Growth Rate by Education													
No Schooling													
Standards 1-3													
Standards 4-6													
Standard 7 or Above													
Weighted Average Population Growth Rate:	3.95%	3.95%	3.94%	3.94%	3.93%	3.93%	3.92%	3.92%	3.92%	3.91%	3.91%	3.91%	3.90%

GABLE Economic Analysis: EFA Objectives/Reforms, Low Population Growth

Female Population, Aged 15+ (Thousands)	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Total	2,121.7	2,194.9	2,260.7	2,379.6	2,491.3	2,612.0	2,740.4	2,875.8	3,020.3	3,174.1	3,339.6	3,519.4	3,713.3	3,920.7
No Schooling	1,252.3	1,302.7	1,356.3	1,412.7	1,471.4	1,530.0	1,587.2	1,643.5	1,699.7	1,754.9	1,810.2	1,867.2	1,925.9	1,985.2
Standards 1-3	263.5	276.3	289.1	304.6	324.4	349.7	381.1	419.4	465.1	518.5	579.6	648.5	725.0	808.8
Standards 4-6	311.4	314.6	321.5	331.3	343.6	357.2	372.3	388.8	407.2	428.0	451.9	478.8	508.2	539.5
Standard 7 or Above	294.4	301.3	313.8	331.0	351.9	375.1	399.9	424.1	448.2	472.7	497.9	524.9	554.3	588.2
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
No Schooling	59.0%	59.4%	59.5%	59.4%	59.1%	58.6%	57.9%	57.1%	56.3%	55.3%	54.2%	53.1%	51.9%	50.7%
Standards 1-3	12.4%	12.6%	12.7%	12.8%	13.0%	13.4%	13.9%	14.6%	15.4%	16.3%	17.4%	18.4%	19.5%	20.6%
Standards 4-6	14.7%	14.3%	14.1%	13.9%	13.8%	13.7%	13.6%	13.5%	13.5%	13.5%	13.5%	13.6%	13.7%	13.8%
Standard 7 or Above	13.9%	13.7%	13.8%	13.9%	14.1%	14.4%	14.6%	14.7%	14.8%	14.9%	14.9%	14.9%	14.9%	15.0%
Estimated Long-Run Growth Rate by Educational Levels:														
No Schooling	4.47%													
Standards 1-3	3.93%													
Standards 4-6	3.40%													
Standard 7 or Above	2.77%													
Weighted Average Population Growth Rate:	4.01%	4.02%	4.02%	4.02%	4.01%	4.01%	4.00%	4.00%	3.99%	3.98%	3.98%	3.97%	3.96%	3.96%

GABLE Economic Analysis: EFA Objectives/Reforms, Low Population Growth

Female Population, Aged 15+ (Thousands)	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Total	4,141.1	4,373.5	4,617.7	4,873.4	5,140.7	5,419.7	5,710.5	6,013.0	6,327.1	6,652.9	6,990.3	7,339.7	7,701.0
No Schooling	2,046.2	2,111.7	2,177.0	2,244.4	2,314.3	2,387.0	2,462.4	2,540.8	2,622.0	2,706.2	2,793.5	2,883.8	2,977.3
Standards 1-3	899.7	997.4	1,101.6	1,212.2	1,329.0	1,451.8	1,580.5	1,714.9	1,855.1	2,000.9	2,152.3	2,309.3	2,471.8
Standards 4-6	572.6	607.4	643.8	681.9	721.6	762.7	805.4	849.6	895.2	942.4	991.2	1,041.6	1,093.6
Standard 7 or Above	620.7	657.2	695.3	734.8	775.8	818.3	862.2	907.7	954.7	1,003.3	1,053.3	1,105.0	1,158.2
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
No Schooling	49.5%	48.3%	47.1%	46.1%	45.0%	44.0%	43.1%	42.3%	41.4%	40.7%	40.0%	39.3%	38.7%
Standards 1-3	21.7%	22.8%	23.9%	24.9%	25.9%	26.8%	27.7%	28.5%	29.3%	30.1%	30.8%	31.5%	32.1%
Standards 4-6	13.8%	13.9%	13.9%	14.0%	14.0%	14.1%	14.1%	14.1%	14.1%	14.2%	14.2%	14.2%	14.2%
Standard 7 or Above	15.0%	15.0%	15.1%	15.1%	15.1%	15.1%	15.1%	15.1%	15.1%	15.1%	15.1%	15.1%	15.0%
Estimated Long-Run Growth Rate by Education													
No Schooling													
Standards 1-3													
Standards 4-6													
Standard 7 or Above													
Weighted Average Population Growth Rate:	3.95%	3.94%	3.94%	3.93%	3.92%	3.92%	3.91%	3.91%	3.90%	3.90%	3.90%	3.89%	3.89%

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TABLE E.17. Budgetary Requirements for the Primary Education Sub-Sector
Low Population Growth Scenarios
All Educational Scenarios

GABLE Economic Analysis: Maintaining the Status Quo, Low Population Growth

Total Education Budgetary Requirements (Kwa cha Millions, 1991 & Beyond are in Constant 1991 Prices)

Item\Year	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
TOTAL EDUCATION	143.3	184.4	165.6	187.8	194.0	211.2	213.0	218.9	225.1	231.3	237.8	244.3	251.1	258.0
As Share of Max. Budgetary Exp.	13.4%	14.3%	11.9%	12.1%	13.1%	13.7%	13.2%	13.0%	12.8%	12.6%	12.4%	12.2%	11.9%	11.6%
Primary Education	57.0	82.0	66.1	85.0	87.6	101.2	99.3	101.3	103.5	105.6	107.8	110.0	112.1	114.4
Share of Total	39.8%	44.5%	39.9%	45.2%	45.2%	47.9%	46.6%	46.3%	46.0%	45.7%	45.3%	45.0%	44.7%	44.3%
Secondary Education	35.4	48.7	44.7	46.2	47.8	49.4	51.1	52.8	54.6	56.5	58.4	60.4	62.4	64.5
Share of Total	24.6%	26.4%	27.0%	24.6%	24.6%	23.4%	24.0%	24.1%	24.3%	24.4%	24.6%	24.7%	24.9%	25.0%
Tertiary Education	36.9	35.0	41.7	43.1	44.5	46.1	47.6	49.2	50.9	52.6	54.4	56.3	58.2	60.2
Share of Total	25.7%	19.0%	25.2%	22.9%	23.0%	21.8%	22.4%	22.5%	22.6%	22.8%	22.9%	23.0%	23.2%	23.3%
Unattributable	14.5	18.7	13.1	13.6	14.0	14.5	15.0	15.5	16.0	16.6	17.1	17.7	18.3	18.9
Share of Total	10.1%	10.1%	7.9%	7.2%	7.2%	6.9%	7.0%	7.1%	7.1%	7.2%	7.2%	7.2%	7.3%	7.3%

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GABLE Economic Analysis: Maintaining the Status Quo, Low Population Growth

Total Education Budgetary Requirements (Kwa

Item\Year	2003	2004	2005	2006
TOTAL EDUCATION	265.2	272.6	280.3	288.3
As Share of Max. Budgetary Exp.	11.6%	11.4%	11.2%	11.0%
Primary Education	116.7	119.0	121.5	124.0
Share of Total	44.0%	43.7%	43.3%	43.0%
Secondary Education	66.7	69.0	71.4	73.8
Share of Total	25.2%	25.3%	25.5%	25.6%
Tertiary Education	62.2	64.3	66.5	68.8
Share of Total	23.5%	23.6%	23.7%	23.9%
Unattributable	19.6	20.2	20.9	21.6
Share of Total	7.4%	7.4%	7.5%	7.5%

GABLE Economic Analysis: EFA Objectives/No Reforms, Low Population Growth

Total Education Budgetary Requirements (Kwa cha Millions, 1991 & Beyond are in Constant 1991 Prices)

Item\Year	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
TOTAL EDUCATION	143.8	184.4	165.6	223.5	241.3	277.0	296.0	316.3	299.9	314.8	282.4	263.7	270.5	278.8
As Share of Max. Budgetary Exp.	13.4%	14.3%	11.9%	14.4%	16.3%	17.9%	18.3%	18.8%	17.0%	17.1%	14.7%	13.1%	12.9%	12.6%
Primary Education	57.0	82.0	66.1	120.7	135.0	167.1	182.3	198.8	178.4	189.1	152.5	129.3	131.6	133.2
Share of Total	39.6%	44.5%	39.9%	54.0%	55.9%	60.3%	[illegible]	62.8%	59.5%	60.1%	54.0%	49.0%	48.6%	48.1%
Secondary Education	35.4	48.7	44.7	46.2	47.8	49.4	51.1	52.8	54.6	56.5	58.4	60.4	62.4	64.5
Share of Total	24.6%	26.4%	27.0%	20.7%	19.8%	17.8%	17.3%	16.7%	18.2%	17.9%	20.7%	22.9%	23.1%	23.3%
Tertiary Education	36.9	35.0	41.7	43.1	44.5	46.1	47.6	49.2	50.9	52.6	54.4	56.3	58.2	60.2
Share of Total	25.7%	19.0%	25.2%	19.3%	18.5%	16.6%	16.1%	15.6%	17.0%	16.7%	19.3%	21.3%	21.5%	21.7%
Unattributable	14.5	18.7	13.1	13.6	14.0	14.5	15.0	15.5	16.0	16.6	17.1	17.7	18.3	18.9
Share of Total	10.1%	10.1%	7.9%	6.1%	5.8%	5.2%	5.1%	4.9%	5.3%	5.3%	6.1%	6.7%	6.8%	6.8%

GABLE Economic Analysis: EFA Objectives/No Reforms, Low Population Growth

Total Education Budgetary Requirements (Kwa

Item\Year	2003	2004	2005	2006
TOTAL EDUCATION	283.3	289.9	296.8	303.8
As Share of Max Budgetary Exp.	12.3%	12.1%	11.8%	11.6%
Primary Education	134.7	136.3	138.0	139.6
Share of Total	47.6%	47.0%	46.5%	46.0%
Secondary Education	66.7	69.0	71.4	73.8
Share of Total	23.6%	23.8%	24.0%	24.3%
Tertiary Education	62.2	64.3	66.5	68.8
Share of Total	22.0%	22.2%	22.4%	22.6%
Unattributable	19.6	20.2	20.9	21.6
Share of Total	6.9%	7.0%	7.1%	7.1%

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GABLE Economic Analysis: EFA Objectives/Reforms, Low Population Growth

Total Education Budgetary Requirements (Kwa cha Millions, 1991 & Beyond are in Constant 1991 Prices)

Item\Year	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
TOTAL EDUCATION	143.8	184.4	165.6	223.5	245.9	284.8	293.5	324.2	313.4	320.6	293.5	273.9	280.9	287.2
As Share of Max. Budgetary Exp.	13.4%	14.3%	11.9%	14.4%	16.6%	18.4%	18.2%	19.2%	17.8%	17.4%	15.3%	13.6%	13.4%	13.1%
Primary Education	57.0	82.0	66.1	120.7	139.8	174.9	179.8	206.6	191.9	194.9	163.5	139.6	141.9	143.5
Share of Total	39.6%	44.5%	39.9%	54.0%	56.8%	61.4%	61.3%	63.7%	61.2%	60.8%	55.7%	50.9%	50.5%	50.0%
Secondary Education	35.4	48.7	44.7	46.2	47.8	49.4	51.1	52.8	54.6	56.5	58.4	60.4	62.4	64.5
Share of Total	24.6%	26.4%	27.0%	20.7%	19.4%	17.3%	17.4%	16.3%	17.4%	17.6%	19.9%	22.0%	22.2%	22.5%
Tertiary Education	36.9	35.0	41.7	43.1	44.5	46.1	47.6	49.2	50.9	52.6	54.4	56.3	58.2	60.2
Share of Total	25.7%	19.0%	25.2%	19.3%	18.1%	16.2%	16.2%	15.2%	16.2%	16.4%	18.5%	20.5%	20.7%	21.0%
Unattributable	14.5	18.7	13.1	13.6	14.0	14.5	15.0	15.5	16.0	16.6	17.1	17.7	18.3	18.9
Share of Total	10.1%	10.1%	7.9%	6.1%	5.7%	5.1%	5.1%	4.8%	5.1%	5.2%	5.8%	6.5%	6.5%	6.6%

GABLE Economic Analysis: EFA Objectives/Reforms, Low Population Growth

Total Education Budgetary Requirements (Kwa

Item\Year	2003	2004	2005	2006
TOTAL EDUCATION	293.7	300.3	307.2	314.4
As Share of Max. Budgetary Exp.	12.8%	12.5%	12.3%	12.0%
Primary Education	145.1	146.7	148.4	150.1
Share of Total	49.4%	48.9%	48.3%	47.8%
Secondary Education	66.7	69.0	71.4	73.8
Share of Total	22.7%	23.0%	23.2%	23.5%
Tertiary Education	62.2	64.3	66.5	68.8
Share of Total	21.2%	21.4%	21.7%	21.9%
Unattributable	19.6	20.2	20.9	21.6
Share of Total	6.7%	6.7%	6.8%	6.9%

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TABLE E.18. Population Growth Implications from Educational Effects on Fertility and Child Survival
High Population Growth Scenarios
All Educational Scenarios

GABLE Economic Analysis: Maintaining the Status Quo, High Population Growth

Female Population, Aged 15+ (Thousands)	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Total	2,121.7	2,194.9	2,280.7	2,379.6	2,491.7	2,616.7	2,754.2	2,903.6	3,064.6	3,236.7	3,419.4	3,612.5	3,815.6	4,026.6
No Schooling	1,252.3	1,302.7	1,356.3	1,412.7	1,471.8	1,533.6	1,596.0	1,665.0	1,734.6	1,807.0	1,882.2	1,960.1	2,041.0	2,125.0
Standards 1-3	263.5	276.3	289.1	304.6	324.4	349.6	380.8	418.0	461.5	511.0	566.5	627.6	694.2	766.1
Standards 4-6	311.4	314.6	321.5	331.3	343.6	357.7	373.4	390.5	408.8	428.2	448.5	469.7	491.7	514.6
Standard 7 or Above	294.4	301.3	313.8	331.0	351.9	375.8	402.0	430.1	459.7	490.5	522.3	555.1	588.7	623.2
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
No Schooling	59.0%	59.4%	59.5%	59.4%	59.1%	58.6%	58.0%	57.3%	56.6%	55.8%	55.0%	54.3%	53.5%	52.7%
Standards 1-3	12.4%	12.6%	12.7%	12.8%	13.0%	13.4%	13.8%	14.4%	15.1%	15.8%	16.6%	17.4%	18.2%	19.0%
Standards 4-6	14.7%	14.3%	14.1%	13.9%	13.8%	13.7%	13.6%	13.4%	13.3%	13.2%	13.1%	13.0%	12.9%	12.8%
Standard 7 or Above	13.9%	13.7%	13.8%	13.9%	14.1%	14.4%	14.6%	14.8%	15.0%	15.2%	15.3%	15.4%	15.4%	15.5%
Estimated Long-Run Growth Rate by Educational Levels:														
No Schooling	4.47%													
Standards 1-3	3.93%													
Standards 4-6	3.4[illegible]													
Standard 7 or Above	2.77%													
Weighted Average Population Growth Rate:	4.01%	4.02%	4.02%	4.02%	4.01%	4.01%	4.00%	4.00%	3.99%	3.99%	3.98%	3.98%	3.97%	3.97%

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GABLE Economic Analysis: Maintaining the Status Quo, High Population Growth

Female Population, Aged 15+ (Thousands)	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Total	4,252.0	4,485.1	4,728.1	4,981.2	5,244.5	5,518.2	5,802.6	6,097.7	6,403.9	6,721.4	7,050.5	7,391.4	7,744.4
No Schooling	2,212.3	2,303.0	2,397.2	2,495.1	2,597.0	2,703.0	2,813.3	2,927.9	3,047.1	3,171.0	3,299.6	3,433.1	3,571.7
Standards 1-3	843.0	924.6	1,011.4	1,102.6	1,198.4	1,298.7	1,403.4	1,512.6	1,626.2	1,744.4	1,867.0	1,994.2	2,126.0
Standards 4-6	538.2	562.6	587.8	613.7	640.4	667.9	696.2	725.4	755.5	786.5	818.5	851.6	885.8
Standard 7 or Above	658.5	694.7	731.7	769.7	808.7	848.7	889.7	931.8	975.1	1,019.6	1,065.4	1,112.5	1,161.0
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
No Schooling	52.0%	51.3%	50.7%	50.1%	49.5%	49.0%	48.5%	48.0%	47.6%	47.2%	46.8%	46.4%	46.1%
Standards 1-3	19.8%	20.6%	21.4%	22.1%	22.9%	23.5%	24.2%	24.8%	25.4%	26.0%	26.5%	27.0%	27.5%
Standards 4-6	12.7%	12.5%	12.4%	12.3%	12.2%	12.1%	12.0%	11.9%	11.8%	11.7%	11.6%	11.5%	11.4%
Standard 7 or Above	15.5%	15.5%	15.5%	15.5%	15.4%	15.4%	[illegible]	15.3%	15.2%	15.2%	15.1%	15.1%	15.0%
Estimated Long-Run Growth Rate by Education													
No Schooling													
Standards 1-3													
Standards 4-6													
Standard 7 or Above													
Weighted Average Population Growth Rate:	3.96%	3.96%	3.96%	3.96%	3.95%	3.95%	3.95%	3.95%	3.95%	3.95%	3.95%	3.95%	3.94%

GABLE Economic Analysis: EFA Objectives/No Reforms, High Population Growth

Female Population, Aged 15+ (Thousands)	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Total	2,121.7	2,194.9	2,260.7	2,379.6	2,491.3	2,614.9	2,749.5	2,894.8	3,051.1	3,218.5	3,397.1	3,586.9	3,788.1	4,000.7
No Schooling	1,252.3	1,302.7	1,356.3	1,412.7	1,471.4	1,531.7	1,592.9	1,654.9	1,718.1	1,782.7	1,848.9	1,916.8	1,986.7	2,058.7
Standards 1-3	263.5	276.3	289.1	304.6	324.4	349.7	381.1	419.2	464.3	516.6	576.1	642.7	716.2	796.4
Standards 4-6	311.4	314.6	321.5	331.3	343.6	357.7	373.4	390.6	409.0	428.7	449.7	472.3	496.3	521.8
Standard 7 or Above	294.4	301.3	313.8	331.0	351.9	375.8	402.0	430.1	459.7	490.5	522.3	555.1	588.9	623.8
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
No Schooling	59.0%	59.4%	59.5%	59.4%	59.1%	58.6%	57.9%	57.2%	56.3%	55.4%	54.4%	53.4%	52.4%	51.5%
Standards 1-3	12.4%	12.6%	12.7%	12.8%	13.0%	13.4%	13.9%	14.5%	15.2%	16.1%	17.0%	17.9%	18.9%	19.9%
Standards 4-6	14.7%	14.3%	14.1%	13.9%	13.8%	13.7%	13.6%	13.5%	13.4%	13.3%	13.2%	13.2%	13.1%	13.0%
Standard 7 or Above	13.9%	13.7%	13.8%	13.9%	14.1%	14.4%	14.6%	14.9%	15.1%	15.2%	15.4%	15.5%	15.5%	15.6%
Estimated Long-Run Growth Rate by Educational Levels:														
No Schooling	4.47%													
Standards 1-3	3.93%													
Standards 4-6	3.40%													
Standard 7 or Above	2.77%													
Weighted Average Population Growth Rate:	4.01%	4.02%	4.02%	4.02%	4.01%	4.01%	4.00%	3.99%	3.99%	3.98%	3.98%	3.97%	3.96%	3.96%

GABLE Economic Analysis: EFA Objectives/No Reforms, High Population Growth

Female Population, Aged 15+ (Thousands)	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Total	4,224.9	4,460.8	4,708.6	4,968.3	5,240.1	5,524.1	5,820.4	6,129.0	6,450.0	6,783.5	7,129.9	7,489.2	7,861.9
No Schooling	2,133.1	2,210.0	2,269.7	2,372.3	2,458.3	2,547.8	2,640.9	2,737.8	2,838.6	2,943.3	3,052.2	3,165.3	3,282.7
Standards 1-3	883.1	976.1	1,075.2	1,180.2	1,291.0	1,407.4	1,529.5	1,657.1	1,790.2	1,928.9	2,073.1	2,222.8	2,378.2
Standards 4-6	548.6	576.8	606.1	636.7	668.4	701.2	735.2	770.4	806.7	844.4	883.3	923.6	965.2
Standard 7 or Above	660.1	697.9	737.6	779.1	822.5	867.7	914.8	963.7	1,014.4	1,067.0	1,121.4	1,177.6	1,235.7
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
No Schooling	50.5%	49.5%	48.6%	47.7%	46.9%	46.1%	45.4%	44.7%	44.0%	43.4%	42.8%	42.3%	41.8%
Standards 1-3	20.9%	21.9%	22.8%	23.8%	24.6%	25.5%	26.3%	27.0%	27.8%	28.4%	29.1%	29.7%	30.2%
Standards 4-6	13.0%	12.9%	12.9%	12.8%	12.8%	12.7%	12.6%	12.6%	12.5%	12.4%	12.4%	12.3%	12.3%
Standard 7 or Above	15.6%	15.6%	15.7%	15.7%	15.7%	15.7%	15.7%	15.7%	15.7%	15.7%	15.7%	15.7%	15.7%
Estimated Long-Run Growth Rate by Education													
No Schooling													
Standards 1-3													
Standards 4-6													
Standard 7 or Above													
Weighted Average Population Growth Rate:	3.95%	3.95%	3.94%	3.94%	3.93%	3.93%	3.93%	3.92%	3.92%	3.92%	3.91%	3.91%	3.91%

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GABLE Economic Analysis: EFA Objectives/Reforms, High Population Growth

Female Population, Aged 15+ (Thousands)	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Total	2,121	2,194.9	2,260.7	2,379.6	2,491.3	2,612.0	2,740.4	2,875.8	3,020.5	3,174.4	3,340.3	3,520.8	3,715.4	3,923.7
No Schooling	1,252.3	1,302.7	1,356.3	1,412.7	1,471.4	1,530.0	1,587.2	1,643.5	1,699.9	1,755.3	1,810.9	1,868.5	1,927.8	1,989.0
Standards 1-3	263.5	276.3	289.1	304.6	324.4	349.7	381.1	419.4	465.1	518.5	579.6	648.5	725.1	809.0
Standards 4-6	311.4	314.6	321.5	331.3	343.8	357.2	372.3	388.8	407.2	428.0	451.9	478.8	508.2	539.5
Standard 7 or Above	294.4	301.3	313.8	331.0	351.9	375.1	399.9	424.1	448.2	472.7	497.9	524.9	554.3	586.2
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
No Schooling	59.0%	59.4%	59.5%	59.4%	59.1%	58.6%	57.9%	57.1%	56.3%	55.3%	54.2%	53.1%	51.9%	50.7%
Standards 1-3	12.4%	12.6%	12.7%	12.8%	13.0%	13.4%	13.9%	14.6%	15.4%	16.3%	17.4%	18.4%	19.5%	20.6%
Standards 4-6	14.7%	14.3%	14.1%	13.9%	13.8%	13.7%	13.6%	13.5%	13.5%	13.5%	13.5%	13.6%	13.7%	13.7%
Standard 7 or Above	13.9%	13.7%	13.8%	13.9%	14.1%	14.4%	14.6%	14.7%	14.8%	14.9%	14.9%	14.9%	14.9%	14.9%
Estimated Long-Run Growth Rate by Educational Levels:														
No Schooling	4.47%													
Standards 1-3	3.93%													
Standards 4-6	3.40%													
Standard 7 or Above	2.77%													
Weighted Average Population Growth Rate:	4.01%	4.02%	4.02%	4.02%	4.01%	4.01%	4.00%	4.00%	3.99%	3.98%	3.98%	3.97%	3.98%	3.98%

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GABLE Economic Analysis: EFA Objectives/Reforms, High Population Growth

Female Population, Aged 15+ (Thousands)	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Total	4,145.5	4,379.7	4,626.1	4,884.4	5,155.1	5,438.3	5,734.1	6,042.5	6,363.5	6,697.3	7,044.1	7,404.1	7,777.5
No Schooling	2,052.2	2,117.1	2,184.2	2,253.7	2,326.1	2,401.7	2,480.7	2,563.0	2,648.8	2,738.1	2,831.0	2,927.6	3,027.9
Standards 1-3	900.0	997.9	1,102.5	1,213.6	1,331.0	1,454.5	1,584.2	1,720.0	1,861.7	2,009.4	2,163.2	2,322.9	2,488.8
Standards 4-6	572.6	607.5	644.1	682.3	722.1	763.6	806.6	851.2	897.4	945.4	995.0	1,046.4	1,099.6
Standard 7 or Above	620.7	657.2	695.3	734.9	775.9	818.5	862.6	908.3	955.6	1,004.4	1,055.0	1,107.2	1,161.2
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
No Schooling	49.5%	48.3%	47.2%	46.1%	45.1%	44.2%	43.3%	42.4%	41.6%	40.9%	40.2%	39.5%	38.9%
Standards 1-3	21.7%	22.8%	23.8%	24.8%	25.8%	26.7%	27.6%	28.5%	29.3%	30.0%	30.7%	31.4%	32.0%
Standards 4-6	13.8%	13.9%	13.9%	14.0%	14.0%	14.0%	14.1%	14.1%	14.1%	14.1%	14.1%	14.1%	14.1%
Standard 7 or Above	15.0%	15.0%	15.0%	15.0%	15.1%	15.1%	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%	14.9%
Estimated Long-Run Growth Rate by Education													
No Schooling													
Standards 1-3													
Standards 4-6													
Standard 7 or Above													
Weighted Average Population Growth Rate:	3.95%	3.94%	3.94%	3.93%	3.92%	3.92%	3.91%	3.91%	3.91%	3.90%	3.90%	3.90%	3.89%

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The conceptual principle behind this analysis is that as females achieve higher levels of education their basic fertility rates tend to decline. In addition, better child care practices are adopted so that child survival rates improve. Combining these factors results in a change in the basic long-run population growth rate associated with higher levels of educational attainment. Thus, as the educational profile of the female population changes the long-run population growth rate also changes. The analysis is based on the projection of the educational profile of Malawi's female population of child-bearing age. This profile is then used to form a weighted average of the expected long-run growth rates implied by the different levels of educational attainment[8]. The long-run growth rates by educational attainment are the medial projections described in Annex 3.

This approach probably overestimates the general reduction in the long-run population growth rate since an immediate movement to the long-run growth rate is assumed, rather than a phased movement into the long-run growth rates. While this section does not provide a fully accurate description of the resulting population growth rates, it provides a general indication of the likely effects of improved female educational attainment on Malawi's long-run population growth rates. One final caveat is in order. The interaction between improved female education and the effectiveness of general family planning programs is not explicitly considered in this analysis. Thus, there may be externality effects from GABLE on the variety of family planning activities presently operating or being designed in Malawi.

B. Discussion of the Results of the Analysis

Tables E.18 and E.19 present the basic results of this analysis under the high population growth scenarios and low population growth scenarios, respectively.

Unlike the previous projections, the projections for examining the GABLE's effects on population growth rates are extended through the year 2015. The reason for this is the gradual nature of the changes in the educational profile of the female population. Even with this extension, however, the observed effects of GABLE on the long-run population growth rate are minimal, and virtually identical for the high population growth and low population growth scenarios.

Without any change in the educational system (status quo scenario), Malawi's long-run growth rate would be expected to

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[8] See Annex 1 to this analysis for a detailed description of the analytical model used for this section.

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TABLE E.16. Budgetary Requirements for the Primary Education Sub-Sector
High Population Growth Scenarios
All Educational Scenarios

GABLE Economic Analysis: Maintaining the Status Quo, High Population Growth

Total Education Budgetary Requirements (Kwa cha Millions, 1991 & Beyond are in Constant 1991 Prices)

Item\Year	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
TOTAL EDUCATION	143.8	184.4	165.6	187.8	194.0	211.2	213.0	219.1	225.5	232.0	238.7	245.5	252.6	260.3
As Share of Max. Budgetary Exp.	13.4%	14.3%	11.9%	12.1%	13.1%	13.7%	13.2%	13.0%	12.8%	12.6%	12.4%	12.2%	12.0%	11.9%
Primary Education	57.0	82.0	66.1	85.0	87.6	101.2	99.3	101.5	103.7	106.0	108.2	110.4	113.0	115.4
Share of Total	39.6%	44.5%	39.9%	45.2%	45.2%	47.9%	46.6%	46.3%	46.0%	45.7%	45.3%	45.0%	44.7%	44.3%
Secondary Education	35.4	48.7	44.7	46.2	47.8	49.4	51.1	52.9	54.7	56.6	58.6	60.7	62.8	65.1
Share of Total	24.6%	26.4%	27.0%	24.6%	24.6%	23.4%	24.0%	24.1%	24.3%	24.4%	24.6%	24.7%	24.9%	25.0%
Tertiary Education	36.9	35.0	41.7	43.1	44.5	46.1	47.6	49.3	51.0	52.8	54.6	56.6	58.6	60.7
Share of Total	25.7%	19.0%	25.2%	22.9%	23.0%	21.8%	22.4%	22.5%	22.6%	22.8%	22.9%	23.0%	23.2%	23.3%
Unattributable	14.5	18.7	13.1	13.6	14.0	14.5	15.0	15.5	16.1	16.6	17.2	17.8	18.4	19.1
Share of Total	10.1%	10.1%	7.9%	7.2%	7.2%	6.9%	7.0%	7.1%	7.1%	7.2%	7.2%	7.3%	7.3%	7.3%

GABLE Economic Analysis: Maintaining the Status Quo, High Population Growth

Total Education Budgetary Requirements (Kwa

Item\Year	2003	2004	2005	2006
TOTAL EDUCATION	26[illegible]0	276.0	284.4	[illegible]93.2
As Share of Max. Budgetary Exp.	11.7%	11.5%	11.3%	11.2%
Primary Education	117.9	120.5	123.2	126.1
Share of Total	44.0%	43.7%	43.3%	43.0%
Secondary Education	67.5	69.9	72.4	75.1
Share of Total	25.2%	25.3%	25.5%	25.6%
Tertiary Education	62.9	65.2	67.5	70.0
Share of Total	23.5%	23.6%	23.7%	23.9%
Unattributable	19.8	20.5	21.2	22.0
Share of Total	7.4%	7.4%	7.5%	7.5%

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GABLE Economic Analysis: EFA Objectives/No Reforms, High Population Growth

Total Education Budgetary Requirements (Kwa cha Millions, 1991 & Beyond are in Constant 1991 Prices)

Item\Year	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
TOTAL EDUCATION	143.8	184.4	165.6	223.5	241.3	277.0	296.0	316.6	300.5	315.8	282.0	264.5	271.6	278.3
As Share of Max. Recurrentary Exp.	13.4%	14.3%	11.9%	14.4%	16.3%	17.9%	18.3%	18.8%	17.1%	17.1%	14.7%	13.2%	12.9%	12.7%
Primary Education	57.0	82.0	66.1	120.7	135.0	167.1	182.3	199.0	178.8	189.7	151.5	129.5	131.8	133.4
Share of Total	39.6%	44.5%	39.9%	54.0%	55.9%	60.3%	61.6%	62.8%	59.5%	60.1%	53.7%	49.0%	48.5%	47.9%
Secondary Education	35.4	48.7	44.7	46.2	47.8	49.4	51.1	52.9	54.7	56.6	58.6	60.7	62.8	65.1
Share of Total	24.6%	26.4%	27.0%	20.7%	19.8%	17.8%	17.3%	16.7%	18.2%	17.9%	20.8%	22.9%	23.1%	23.4%
Tertiary Education	36.9	35.0	41.7	43.1	44.5	46.1	47.6	49.3	51.0	52.6	54.6	56.6	58.6	60.7
Share of Total	25.7%	19.0%	25.2%	19.3%	18.5%	16.6%	16.1%	15.6%	17.0%	16.7%	19.4%	21.4%	21.6%	21.8%
Unattributable	14.5	18.7	13.1	13.6	14.0	14.5	15.0	15.5	16.1	16.6	17.2	17.8	18.4	19.1
Share of Total	10.1%	10.1%	7.9%	6.1%	5.8%	5.2%	5.1%	4.9%	5.3%	5.3%	6.1%	6.7%	6.8%	6.9%

GABLE Economic Analysis: EFA Objectives/No Reforms, High Population Growth

Total Education Budgetary Requirements (Kwa

Item\Year	2003	2004	2005	2006
TOTAL EDUCATION	285.1	292.2	299.5	307.3
As Share of Max. Budgetary Exp.	12.4%	12.2%	12.0%	11.7%
Primary Education	135.0	136.6	138.4	140.2
Share of Total	47.3%	46.8%	46.2%	45.6%
Secondary Education	67.5	69.9	72.4	75.1
Share of Total	23.7%	23.9%	24.2%	24.4%
Tertiary Education	62.9	65.2	67.5	70.0
Share of Total	22.1%	22.3%	22.5%	22.8%
Unattributable	19.8	20.5	21.2	22.0
Share of Total	6.9%	7.0%	7.1%	7.2%

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GABLE Economic Analysis: EFA Objectives/Reforms, High Population Growth

Total Education Budgetary Requirements (Kwa cha Millions, 1991 & Beyond are in Constant 1991 Prices)

Item\Year	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
TOTAL EDUCATION	143.8	184.4	165.6	223.5	245.9	284.8	293.5	324.5	314.1	321.6	292.9	274.7	282.0	288.7
As Share of Max. Budgetary Exp.	13.4%	14.3%	11.9%	14.4%	16.6%	18.4%	18.2%	19.2%	17.8%	17.5%	15.2%	13.7%	13.4%	13.1%
Primary Education	57.0	82.0	66.1	120.7	139.6	174.9	179.8	208.8	192.3	195.5	162.4	139.7	142.1	143.7
Share of Total	39.6%	44.5%	39.9%	54.0%	56.8%	61.4%	61.3%	63.7%	61.2%	60.8%	55.5%	50.9%	50.4%	49.8%
Secondary Education	35.4	48.7	44.7	46.2	47.8	49.4	51.1	52.9	54.7	56.6	58.6	60.7	62.8	65.1
Share of Total	24.6%	26.4%	27.0%	20.7%	19.4%	17.3%	17.4%	16.3%	17.4%	17.6%	20.0%	22.1%	22.3%	22.6%
Tertiary Education	36.9	35.0	41.7	43.1	44.5	46.1	47.6	49.3	51.0	52.8	54.6	56.6	58.6	60.7
Share of Total	25.7%	19.0%	25.2%	19.3%	18.1%	16.2%	16.2%	15.2%	16.2%	16.4%	18.7%	20.6%	20.8%	21.0%
Unattributable	14.5	18.7	13.1	13.6	14.0	14.5	15.0	15.5	16.1	16.6	17.2	17.8	18.4	19.1
Share of Total	10.1%	10.1%	7.9%	6.1%	5.7%	5.1%	5.1%	4.8%	5.1%	5.2%	5.9%	6.5%	6.5%	6.6%

GABLE Economic Analysis: EFA Objectives/Reforms, High Population Growth

Total Education Budgetary Requirements (Kwa

Item\Year	2003	2004	2005	2006
TOTAL EDUCATION	295.5	302.6	310.0	317.8
As Share of Max. Budgetary Exp.	12.9%	12.6%	12.4%	12.1%
Primary Education	1 1' 4	147.0	148.8	150.7
Share of Total	49.2%	48.6%	48.0%	47.4%
Secondary Education	67.5	69.9	72.4	75.1
Share of Total	22.8%	23.1%	23.4%	23.6%
Tertiary Education	62.9	65.2	67.5	70.0
Share of Total	21.3%	21.5%	21.8%	22.0%
Unattributable	19.8	20.5	21.2	22.0
Share of Total	6.7%	6.8%	6.9%	6.9%

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A. High Population Growth Scenarios

A.1. Educational Scenario 1: Maintaining the Status Quo

In order to maintain the current educational system roughly 12 percent to 13 percent of total GOM expenditures would need to go to education. This share declines to between 11 percent and 11.5 percent by 2005 due to the teacher shortage which appears at this time. While the need for maintaining expenditures is reduced due to this teacher shortage, it occurs at the cost of a deterioration of primary education.

The maintenance of the status quo for primary education would require a consistent allocation of roughly 45 percent of the total resources going to the education sector. This represents roughly a five percentage point increase over recent allocations.

A.2. Educational Scenario 2: EFA Objectives Without GABLE Reforms

The desired increased enrollments and quality improvements under the EFA Objectives requires a significant increase in total budgetary resources going to both the education sector and especially to primary education. In order to satisfy the identified improvements described above, roughly 18.5 percent to 19 percent of total budgetary expenditures would need to be directed to education. The decline in these expenditures shown in Table E.16 following 1996 result from the beginning of the teacher shortage and the resulting slowdown of classroom construction. It also corresponds to mounting movement away from the EFA targets. If the availability of teachers is increased either through the expansion of the Teacher Training College System or through other special mechanisms, this decline in resource requirements would not occur.

The needs of primary education are the driving force in the increase in the budgetary requirements for education. To meet the EFA Objectives as identified under this scenario, the share of the increased educational resources going to primary education would need to increase from roughly 40 percent currently to roughly 62 percent or 63 percent. Again this share begins to decline in 1997 due to the shortage of teachers.

A.3. Educational Scenario 3: EFA Objectives With GABLE Reforms

Incorporating the GABLE reforms with the EFA Objectives results in marginally higher budgetary requirements for both education and primary education than under the previous scenario. These increased resource requirements come from two major sources. First, GABLE is expected to result in slightly higher overall primary enrollments than under the second scenario due to the special incentives provided for female participation and retention in the system. Second, the modifications to the Teacher Training College policies provides an additional flow of

teachers which provides a slight postponement of the forecast teacher shortage. As a result, teacher production and salary costs, as well as, construction costs are moderately higher under this scenario.

The implications of these differences are that slightly more than 19 percent of total budgetary expenditures would need to go to education to finance and sustain the improved system. Just as in the second scenario, this budgetary share declines after 1997 due to the shortage of teachers. Likewise, roughly 62 percent to 64 percent of these increased educational resources would be required by primary education.

B. Low Population Growth Scenarios

Despite the fact that the reduced population growth rates under these scenarios imply a lower student body in the future, their immediate effects on resource requirements for education are minimal and only begin to show up after 1998 or 1999. This holds true for all of the educational scenarios. Further, the reductions in resource requirements for the education sector only amount to 0.1 percentage points to 0.2 percentage points of GDP.

VI. Implications for Malawi's Long-Run Population Growth Rate

A. Preliminary Considerations and Comments

The rationale being used for the inclusion of the GABLE activity within USAID/Malawi's overall country strategy and the reason for its special emphasis on female education is GABLE's expected contribution to reducing Malawi's population growth rate. The possible impacts of these effects are considered in this section.

The conceptual principle behind this analysis is that as females achieve higher levels of education their basic fertility rates tend to decline. In addition, better child care practices are adopted so that child survival rates improve. Combining these

factors results in a change in the basic long-run population growth rate associated with higher levels of educational attainment. Thus, as the educational profile of the female population changes the long-run population growth rate also changes. The analysis is based on the projection of the educational profile of Malawi's female population of child-bearing age. This profile is then used to form a weighted average of the expected long-run growth rates implied by the different levels of educational attainment**8.See Annex 1 to this analysis for a detailed description of the analytical model used for this section.

*. The long-run growth rates by educational attainment are the medial projections described in Annex 3.

This approach probably overestimates the general reduction in the long-run population growth rate since an immediate movement to the long-run growth rate is assumed, rather than a phased movement into the long-run growth rates. While this section does not provide a fully accurate description of the resulting population growth rates, it provides a general indication of the likely effects of improved female educational attainment on Malawi's long-run population growth rates. One final caveat is in order. The interaction between improved female education and the effectiveness of general family planning programs is not explicitly considered in this analysis. Thus, there may be externality effects from GABLE on the variety of family planning activities presently operating or being designed in Malawi.

B. Discussion of the Results of the Analysis

Tables E.18 and E.19 present the basic results of this analysis under the high population growth scenarios and low population growth scenarios, respectively.

Unlike the previous projections, the projections for examining the GABLE's effects on population growth rates are extended through the year 2015. The reason for this is the gradual nature of the changes in the educational profile of the female population. Even with this extension, however, the observed effects of GABLE on the long-run population growth rate are minimal, and virtually identical for the high population growth and low population growth scenarios.

Without any change in the educational system (status quo scenario), Malawi's long-run growth rate would be expected to decline from an estimated level of 4.01 percent per annum in 1989 to 3.94 percent by 2015. With the increased enrollments desired under the EFA objectives, but without the effects of the GABLE reforms (scenario 2), this long-run population growth rate is expected to decline by an additional 0.03 percentage points to 3.91 percent by 2015. When the effects of the GABLE reforms are included, i.e., the further increase in enrollment and the improved throughput of students, the long-run population growth

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rate is expected decline a further 0.02 percentage points to 3.89 percent by 2015. Thus, the cumulative effect of the changes in the primary education sub-sector under the EFA and GABLE is to reduce the long-run population growth rate 24 years in the future by 0.05 percentage points. Effectively, this increases the doubling time for the population from 18.3 years to 18.5 years, a gain of 2.4 months.

VII. Cost-Benefit Analysis

A. General Methodology

The final component of this analysis is the actual cost-benefit analysis of the GABLE activity in accordance with the current Africa Bureau guidance for the analysis of Non-Project Assistance (NPA) activities. The analysis is conducted for both the High Population Growth Scenarios and the Low Population Growth Scenarios**9.See the first Annex to this report for a more detailed description of the methodology used for these calculations.
*.

GABLE's costs are composed of the following three items:

(1) The opportunity costs of the NPA funds disbursed, converted into local currency at the appropriate shadow exchange rate;
(2) The Project Assistance (PA) expenditures converted into local currency at the appropriate shadow exchange rate; and
(3) The increased GOM budgetary costs for primary education resulting from the GABLE sponsored reforms.

For purposes of this analysis, the shadow exchange rate used is MK 2.9/US$ and the opportunity cost of the NPA funds used is 11.5 percent which is the rate of interest which can be earned on locally registered stocks in Malawi, and the discount rate used is 10 percent.

The planned NPA and PA disbursements under GABLE follow the following pattern:

Year	NPA Amount Dollars Millions	PA Amount Dollars Millions
1992	4.0	0.5
1993	5.0	1.5
1994	5.0	2.0
1995	0.0	1.5
1996	0.0	0.5

The increased budgetary costs are given by the difference between the primary education expenditures required under Scenario 2 (EFA Objectives Without GABLE Reforms) and those required under Scenario 3 (EFA Objectives With GABLE Reforms).

The general approach used to estimate the value of the benefits of the GABLE reforms is to examine the efficiency gains (cost-savings) resulting from the implementation of those reforms. The analysis is complicated by the fact that due to the effects of the GABLE reforms, the primary education system carries a larger student load with the reforms than without. To account for this load discrepancy, the estimation of the benefits is based on what the unreformed system would have cost if it had to produce the same number of graduates as the reformed system. Thus, the benefit stream is given by the difference between the product of the number of graduates produced by the reformed system and the cost of producing a graduate for the unreformed and reformed primary education systems. This benefit stream is estimated for both standard four graduates and standard eight graduates.

The final step in the process is to calculate the net benefits, the discounted net benefits (in both annual and cumulative form), and the discounted benefit-cost ratio (again in annual and cumulative form) for the above items.

In addition, the possible cost-savings for child health care and primary education resulting from the reduction in the long-run population growth rates across these two scenarios are also examined.

B. Summary of Results

Table E.20 summarizes the results of the cost-benefit analysis for the scenario high population growth scenario, while Table E.21 does the same for the low population growth scenario. Given the virtually identical results for these two scenarios, only the high population growth scenario results are discussed in any detail.

The discounted net-benefit stream based on the cost-savings from standard four graduates yields a negative cumulative discounted net-benefits through the year 2006; however, when benefits are calculated on the basis of standard eight graduates, cumulative

discounted net-benefits are positive beginning with 1993 and increase to a value of K119 million by the year 2006.

Using this same basis for estimating the benefit stream, the cumulative discounted benefit-cost ratio rises from 2.03 for the period 1992 through 1997, to 2.06 for the period 1992 through 2001, and increases further to 2.20 for the period 1992 through 2006. These cumulative discounted benefit-cost ratios imply that the discounted benefits are more than twice the discounted costs over this time period.

The main factor which generates these cost-savings is the expected immediate implementation of the 75/20/5 admission policy for secondary schools (form one). The effect of this policy will be an immediate reduction in the volume of repeaters in standard eight which generates an estimated increase in standard eight completers of approximately 9,500 students compared to the no reform EFA scenario. Thus, the base on which the cost-savings are calculated (the number of standard eight leavers with the GABLE reforms) immediately creates a large estimated savings.

The effects of GABLE on population growth actually increase social service costs since there is a slight increase (negative reduction) in the population growth rate over the period 1994 through 2001. While this effect begins to reverse in 2003, the timing of these changes and the fact that absolute per student primary education costs increase with the effects of GABLE, GABLE results in increased costs for future health and education services. These increased costs, however, are not sufficient to eliminate the cumulative net-benefits from the cost-savings of producing standard eight graduates.

TABLE E.20. Benefit-Cost Analysis Tables
High Population Growth Scenario

GABLE PAAD Economic Analysis: Benefit/Cost, High Population Growth

Cost-Benefit Analysis	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Costs (Kwacha Millions):														
Opportunity Costs of NPA Funds	0.0	2.6	10.6	19.3	9.0	14.5	18.0	11.4	16.4	15.5	15.5	15.4	15.4	15.4
Project Expenditures	0.0	1.3	3.0	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7
Increased Budgetary Costs	0.0	1.5	4.4	5.8	4.4	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	3.2	8.9	0.0	8.4	13.4	6.7	11.7	10.9	10.8	10.8	10.7	10.7
Discounted Costs (Kwacha Millions):	0.0	2.5	8.7	14.5	6.2	9.0	10.2	5.8	7.7	6.6	6.0	5.4	4.9	4.5
Benefits (Kwacha Millions):														
Cost-Savings to Produce GABLE Graduates:														
Standard 4	0.0	0.0	(4.6)	(2.5)	7.5	9.6	21.3	38.3	30.4	24.0	20.6	18.1	16.2	15.2
Standard 8	0.0	22.4	7.9	66.5	17.4	11.0	12.2	29.9	25.7	29.8	39.0	46.1	46.5	41.4
Discounted Benefits (Kwacha Millions):														
Standard 4	0.0	0.0	(3.8)	(1.9)	5.1	5.9	12.0	19.7	14.2	10.2	8.0	6.4	5.1	4.4
Standard 8	0.0	20.4	6.5	51.4	11.9	6.8	6.9	15.3	12.0	12.6	15.1	16.1	14.8	12.0
Net-Benefits (Kwacha Millions):														
Standard 4	0.0	(2.6)	(15.2)	(21.8)	(1.5)	(4.9)	3.2	26.9	14.0	8.4	5.1	2.7	0.8	(0.2)
Standard 8	0.0	19.6	(2.6)	49.1	8.3	(3.5)	(5.9)	18.5	9.3	14.3	23.5	30.6	31.1	26.0
Discounted Net-Benefits														
Standard 4	0.0	(2.5)	(12.5)	(16.4)	(1.0)	(3.1)	1.8	13.8	6.5	3.6	2.0	0.9	0.2	(0.1)
Standard 8	0.0	17.8	(2.2)	36.9	5.7	(2.2)	(3.3)	9.5	4.3	6.0	9.1	10.7	9.9	7.5
Cumulative Discounted Net-Benefits														
Standard 4	0.0	(2.5)	(15.1)	(31.5)	(32.5)	(35.5)	(33.7)	(19.9)	(13.4)	(9.8)	(7.8)	(6.9)	(6.6)	(6.7)
Standard 8	0.0	17.8	15.7	52.6	58.3	56.1	52.8	62.3	66.6	72.6	81.7	92.5	102.4	109.9
Discounted Benefit/Cost Ratios:														
Annual														
Standard 4	NA	0.00	-0.44	-0.13	0.84	0.66	1.18	3.36	1.85	1.54	1.33	1.17	1.05	0.98
Standard 8	NA	8.05	0.75	3.54	1.92	0.76	0.67	2.62	1.57	1.92	2.52	2.98	3.02	2.69
Cumulative:	1992 1997	1992 2001	1992 2006											
Standard 4	0.34	0.90	0.93											
Standard 8	2.03	2.06	2.20											

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GABLE PAAD Economic Analysis: Benefit/Cost, High Population Growth

Cost-Benefit Analysis	2005	2006
Costs (Kwacha Millions):		
Opportunity Costs of NPA Funds	15.3	15.2
Project Expenditures	4.7	4.7
Increased Budgetary Costs	0.0	0.0
	10.6	10.6
Discounted Costs (Kwacha Millions):	4.0	3.6
Benefits (Kwacha Millions):		
Cost-Savings to Produce GABLE Graduates:		
Standard 4	14.9	14.9
Standard 8	36.2	32.1
Discounted Benefits (Kwacha Millions):		
Standard 4	3.9	3.6
Standard 8	9.5	7.7
Net-Benefits (Kwacha Millions):		
Standard 4	(0.4)	(0.3)
Standard 8	21.0	16.8
Discounted Net-Benefits		
Standard 4	(0.1)	(0.1)
Standard 8	5.5	4.0
Cumulative Discounted Net-Benefits		
Standard 4	(6.8)	(6.9)
Standard 8	115.4	119.4
Discounted Benefit/Cost Ratios:		
Annual		
Standard 4	0.97	0.98
Standard 8	2.37	2.10
Cumulative:		
Standard 4		
Standard 8		

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GABLE PAAD Economic Analysis: Benefit/Cost, High Population Growth

SAVINGS FROM REDUCED POPULATION GRO	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Absolute Reduction in the Population Growth Rate Due to GABLE	0.000%	0.000%	0.000%	-0.000%	-0.000%	-0.001%	-0.001%	-0.003%	-0.003%	-0.002%	-0.001%	0.000%	0.002%	0.004%
Total Maternal Child Health Costs (Kwacha Millions):														
Without GABLE	17.5	18.2	19.0	19.7	20.5	21.3	22.2	23.1	24.0	25.0	25.9	27.0	28.0	29.1
With GABLE	17.5	18.2	19.0	19.7	20.5	21.3	22.2	23.1	24.0	25.0	25.9	27.0	28.0	29.1
Cost-Savings	0.000	0.000	0.000	0.000	(0.000)	(0.000)	(0.000)	(0.001)	(0.001)	(0.002)	(0.003)	(0.003)	(0.003)	(0.003)
Primary Education Expenditures (Kwacha Millions):														
Without GABLE	49.5	51.2	53.5	56.6	60.0	63.2	66.5	69.8	73.1	76.6	80.1	83.7	87.3	91.0
With GABLE	49.5	51.2	54.1	58.1	61.9	65.9	70.3	74.2	77.6	81.0	84.6	88.3	92.0	95.7
Cost-Savings	0.000	0.000	(0.554)	(1.488)	(1.968)	(2.714)	(3.824)	(4.382)	(4.460)	(4.451)	(4.509)	(4.599)	(4.657)	(4.649)
Absolute Savings														
Unneeded Health Expenditures	0.000	0.000	(0.554)	(1.488)	(1.968)	(2.715)	(3.825)	(4.383)	(4.461)	(4.453)	(4.512)	(4.602)	(4.661)	(4.652)
Unneeded Primary Education Exp.	0.000	0.000	0.000	0.000	(0.000)	(0.000)	(0.000)	(0.001)	(0.001)	(0.002)	(0.003)	(0.003)	(0.003)	(0.003)
	0.000	0.000	(0.554)	(1.488)	(1.968)	(2.714)	(3.824)	(4.382)	(4.460)	(4.451)	(4.509)	(4.599)	(4.657)	(4.649)
Discounted Savings	0.000	0.000	(0.458)	(1.118)	(1.344)	(1.686)	(2.159)	(2.249)	(2.081)	(1.888)	(1.740)	(1.613)	(1.485)	(1.348)
Cumulative Discounted Savings	0.000	0.000	(0.458)	(1.576)	(2.920)	(4.606)	(6.765)	(9.014)	(11.095)	(12.983)	(14.723)	(16.336)	(17.821)	(19.168)

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GABLE PAAD Economic Analysis: Benefit/Cost, High Population Growth

SAVINGS FROM REDUCED POPULATION GRO	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Absolute Reduction in the Population Growth Rate Due to GABLE	0.006%	0.007%	0.009%	0.010%	0.011%	0.012%	0.013%	0.014%	0.015%	0.015%	0.016%
Total Maternal Child Health Costs (Kwacha Millions):											
Without GABLE	30.3	31.5	32.7	34.0	35.4	36.7	38.2	39.7	41.2	42.8	44.5
With GABLE	30.3	31.5	32.7	34.0	35.3	36.7	38.2	39.7	41.2	42.8	44.5
Cost-Savings	(0.002)	0.000	0.002	0.005	0.009	0.013	0.018	0.024	0.030	0.036	0.046
Primary Education Expenditures (Kwacha Millions):											
Without GABLE	94.7	98.5	102.4	106.4	110.5	114.8	119.3	123.9	128.8	133.8	139.0
With GABLE	99.3	103.0	106.8	110.8	115.0	119.4	124.0	128.8	133.8	139.0	144.4
Cost-Savings	(4.589)	(4.501)	(4.429)	(4.411)	(4.457)	(4.555)	(4.687)	(4.840)	(5.007)	(5.183)	(5.365)
Absolute Savings	(4.591)	(4.501)	(4.426)	(4.406)	(4.448)	(4.542)	(4.669)	(4.816)	(4.976)	(5.145)	(5.320)
Unneeded Health Expenditures	(0.002)	0.000	0.002	0.005	0.009	0.013	0.018	0.024	0.030	0.036	0.046
Unneeded Primary Education Exp.	(4.589)	(4.501)	(4.429)	(4.411)	(4.457)	(4.555)	(4.687)	(4.840)	(5.007)	(5.183)	(5.365)
Discounted Savings	(1.209)	(1.078)	(0.963)	(0.872)	(0.800)	(0.743)	(0.694)	(0.651)	(0.611)	(0.575)	(0.540)
Cumulative Discounted Savings	(20.377)	(21.455)	(22.418)	(23.290)	(24.090)	(24.833)	(25.527)	(26.177)	(26.788)	(27.363)	(27.903)

TABLE E.21. Benefit-Cost Analysis Tables
High Population Growth Scenario

GABLE PAAD Economic Analysis: Benefit/Cost, Low Population Growth

Cost-Benefit Analysis	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Costs (Kwacha Millions):														
Opportunity Costs of NPA Funds	0.0	2.8	10.6	19.3	9.0	14.5	18.0	11.3	16.5	15.5	15.5	15.4	15.4	15.4
Project Expenditures	0.0	1.3	3.0	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7
Increased Budgetary Costs	0.0	1.5	4.4	5.8	4.4	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	3.2	8.9	0.0	8.4	13.3	6.7	11.9	10.9	10.8	10.8	10.7	10.7
Discounted Costs (Kwacha Millions):	0.0	2.5	8.7	14.5	6.2	9.0	10.2	5.8	7.7	6.6	6.0	5.4	4.9	4.5
Benefits (Kwacha Millions):														
Cost-Savings to Produce GABLE Graduates:														
Standard 4	0.0	0.0	(4.6)	(2.5)	7.5	9.6	21.3	38.2	30.6	23.9	20.5	18.0	16.0	15.0
Standard 8	0.0	22.4	7.9	68.5	17.4	11.0	12.2	29.8	25.8	29.7	39.0	46.0	46.3	41.1
Discounted Benefits (Kwacha Millions):														
Standard 4	0.0	0.0	(3.8)	(1.9)	5.1	5.9	12.0	19.6	14.3	10.1	7.9	6.3	5.1	4.3
Standard 8	0.0	20.4	6.5	51.4	11.9	6.8	6.9	15.3	12.1	12.6	15.0	16.1	14.8	11.9
Net-Benefits (Kwacha Millions):														
Standard 4	0.0	(2.8)	(15.2)	(21.8)	(1.5)	(4.9)	3.3	26.9	14.0	8.4	5.0	2.6	0.6	(0.4)
Standard 8	0.0	19.6	(2.6)	49.1	8.3	(3.5)	(5.8)	18.5	9.3	14.2	23.5	30.5	30.9	25.7
Discounted Net-Benefits														
Standard 4	0.0	(2.5)	(12.5)	(16.4)	(1.0)	(3.1)	1.8	13.8	6.5	3.5	1.9	0.9	0.2	(0.1)
Standard 8	0.0	17.8	(2.2)	36.9	5.7	(2.2)	(3.3)	9.5	4.3	6.0	9.0	10.7	9.9	7.4
Cumulative Discounted Net-Benefits														
Standard 4	0.0	(2.5)	(15.1)	(31.5)	(32.5)	(35.6)	(33.7)	(19.9)	(13.4)	(9.8)	(7.9)	(7.0)	(6.8)	(6.9)
Standard 8	0.0	17.8	15.7	52.6	58.3	56.1	52.8	62.3	66.6	72.6	81.7	92.4	102.3	109.7
Discounted Benefit/Cost Ratios:														
Annual														
Standard 4	NA	0.00	-0.44	-0.13	0.84	0.66	1.18	3.37	1.85	1.54	1.32	1.17	1.04	0.97
Standard 8	NA	8.05	0.75	3.54	1.92	0.76	0.68	2.63	1.56	1.91	2.51	2.98	3.01	2.67
Cumulative:	1992	1992	1992											
	1997	2001	2006											
Standard 4	0.34	0.90	0.93											
Standard 8	2.03	2.06	2.19											

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GABLE PAAD Economic Analysis: Benefit/Cost, Low Population Growth

Cost-Benefit Analysis	2005	2006
Costs (Kwacha Millions):		
Opportunity Costs of NPA Funds	15.3	15.2
Project Expenditures	4.7	4.7
Increased Budgetary Costs	0.0	0.0
	10.6	10.6
Discounted Costs (Kwacha Millions):	4.0	3.6
Benefits (Kwacha Millions):		
Cost-Savings to Produce GABLE Graduates:		
Standard 4	14.6	14.6
Standard 8	35.9	31.6
Discounted Benefits (Kwacha Millions):		
Standard 4	3.9	3.5
Standard 8	9.4	7.6
Net-Benefits (Kwacha Millions):		
Standard 4	(0.6)	(0.7)
Standard 8	20.6	16.4
Discounted Net-Benefits		
Standard 4	(0.2)	(0.2)
Standard 8	5.4	3.9
Cumulative Discounted Net-Benefits		
Standard 4	(7.1)	(7.3)
Standard 8	115.1	119.0
Discounted Benefit/Cost Ratios:		
Annual		
Standard 4	0.98	0.98
Standard 8	2.35	2.08
Cumulative:		
Standard 4		
Standard 8		

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GABLE PAAD Economic Analysis: Benefit/Cost, Low Population Growth

SAVINGS FROM REDUCED POPULATION GRO	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Absolute Reduction in the Population Growth Rate Due to GABLE	0.000%	0.000%	0.000%	-0.000%	-0.000%	-0.001%	-0.002%	-0.003%	-0.003%	-0.002%	-0.001%	0.000%	0.002%	0.004%
Total Maternal Child Health Costs (Kwacha Millions):														
Without GABLE	17.5	18.2	19.0	19.7	20.5	21.3	22.2	23.1	24.0	25.0	25.9	27.0	28.0	29.1
With GABLE	17.5	18.2	19.0	19.7	20.5	21.3	22.2	23.1	24.0	25.0	25.9	27.0	28.0	29.1
Cost-Savings	0.000	0.000	0.000	0.000	(0.000)	(0.000)	(0.000)	(0.001)	(0.001)	(0.002)	(0.003)	(0.003)	(0.003)	(0.003)
Primary Education Expenditures (Kwacha Millions):														
Without GABLE	49.5	51.2	53.5	56.6	60.0	63.3	66.6	69.9	73.3	76.8	80.3	84.0	87.7	91.5
With GABLE	49.5	51.2	54.1	58.1	61.9	66.0	70.4	74.3	77.8	81.2	84.9	88.6	92.4	96.1
Cost-Savings	0.000	0.000	(0.554)	(1.488)	(1.968)	(2.716)	(3.828)	(4.388)	(4.468)	(4.457)	(4.518)	(4.608)	(4.668)	(4.654)
Absolute Savings														
Unneeded Health Expenditures	0.000	0.000	(0.554)	(1.488)	(1.968)	(2.716)	(3.829)	(4.388)	(4.468)	(4.459)	(4.520)	(4.611)	(4.669)	(4.657)
Unneeded Primary Education Exp.	0.000	0.000	0.000	0.000	(0.000)	(0.000)	(0.000)	(0.001)	(0.001)	(0.002)	(0.003)	(0.003)	(0.003)	(0.003)
	0.000	0.000	(0.554)	(1.488)	(1.968)	(2.716)	(3.828)	(4.388)	(4.468)	(4.457)	(4.518)	(4.608)	(4.668)	(4.654)
Discounted Savings	0.000	0.000	(0.458)	(1.118)	(1.344)	(1.687)	(2.161)	(2.252)	(2.084)	(1.891)	(1.743)	(1.616)	(1.488)	(1.349)
Cumulative Discounted Savings	0.000	0.000	(0.458)	(1.576)	(2.920)	(4.607)	(6.768)	(9.020)	(11.104)	(12.995)	(14.738)	(16.354)	(17.842)	(19.191)

GABLE PAAD Economic Analysis: Benefit/Cost, Low Population Growth

SAVINGS FROM REDUCED POPULATION GRO	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Absolute Reduction in the Population Growth Rate Due to GABLE	0.006%	0.007%	0.009%	0.010%	0.011%	0.012%	0.013%	0.014%	0.014%	0.015%	0.016%
Total Maternal Child Health Costs (Kwacha Millions):											
Without GABLE	30.3	31.5	32.7	34.0	35.4	36.7	38.2	39.7	41.2	42.8	44.5
With GABLE	30.3	31.5	32.7	34.0	35.3	36.7	38.2	39.7	41.2	42.8	44.5
Cost-Savings	(0.002)	(0.000)	0.002	0.005	0.009	0.013	0.018	0.024	0.030	0.037	0.045
Primary Education Expenditures (Kwacha Millions):											
Without GABLE	95.3	99.1	103.1	107.2	111.4	115.8	120.4	125.1	130.0	135.0	140.3
With GABLE	99.9	103.6	107.5	111.6	115.9	120.3	125.0	129.9	134.9	140.2	145.6
Cost-Savings	(4.589)	(4.498)	(4.420)	(4.395)	(4.434)	(4.524)	(4.650)	(4.797)	(4.958)	(5.128)	(5.305)
Absolute Savings	(4.591)	(4.498)	(4.418)	(4.390)	(4.425)	(4.511)	(4.632)	(4.773)	(4.928)	(5.091)	(5.260)
Unneeded Health Expenditures	(0.002)	(0.000)	0.002	0.005	0.009	0.013	0.018	0.024	0.030	0.037	0.045
Unneeded Primary Education Exp.	(4.589)	(4.498)	(4.420)	(4.395)	(4.434)	(4.524)	(4.650)	(4.797)	(4.958)	(5.128)	(5.305)
Discounted Savings	(1.209)	(1.077)	(0.961)	(0.858)	(0.798)	(0.738)	(0.689)	(0.645)	(0.605)	(0.569)	(0.534)
Cumulative Discounted Savings	(20.400)	(21.477)	(22.438)	(23.306)	(24.102)	(24.840)	(25.528)	(26.173)	(26.779)	(27.347)	(27.881)

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ANNEX I

INSTITUTIONAL ANALYSIS

SEPTEMBER 30, 1991

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INSTITUTIONAL ANALYSIS

I. INTRODUCTION, BACKGROUND AND OBJECTIVE

A. Introduction

The Government of Malawi/Ministry of Education and Culture (MOEC) and USAID have agreed to address problems of girls not attaining satisfactory levels of achievement in primary education. These problems are part of a larger problem of resource shortage in the education sector, generally, and primary education in particular. In response to this situation, USAID will provide the Government of Malawi with $20 million over a five year period through a combination of cash transfers and project assistance through the GABLE (Girls' Attainment in Basic Literacy and Education) program.

B. Objective of GABLE

The objective of GABLE is to increase girls' attainment in basic education. Attainment is defined as access, persistence and completion of primary education. Achieving this objective requires overcoming numerous constraints at each phase of the attainment process.

In this annex the constraints associated with each phase are analyzed, and remedial courses of action to be taken, with the support of GABLE, are suggested. In analyzing constraints and remedial courses of action, attention is focused on institutional issues. Institutional analysis, as used here, includes both formal organizational factors (e.g., human and financial resources, organizational structure, organizational goals, etc.) and also informal institutional factors, such as societal attitudes about the value of educating girls, organizational climate and power, and the policy environment within which MOEC operates.

The remainder of the annex is organized as follows: (1) an analysis of the two major constraints which affect the education sector generally, and education of girls, specifically; (2) an analysis of each phase of educational attainment (access, persistence, and completion); (3) issues of sustainability are dealt with in a section on enhancing institutional commitment; and (4) the final sections are concerned with issues of timing among GABLE activities and a summary of recommendations. The general structure of the annex follows the flow of issues and actions summarized in the Policy Matrix. In the interest of maintaining attention on key issues, analysis and discussion is limited to the institutional issues which are essential to overcoming the principal constraints.

II. MACRO-CONSTRAINTS:

Analysis of the issues facing girls' education reveals two primary constraints which have an impact on all other considerations--(a) overall shortage of financial resources and (b) institutionalized attitudes about the low value of educating girls. Because they affect everything else, it is necessary to consider these

constraints first, and establish how GABLE will attempt to address them, before considering problems in the phases of educational attainment of primary school girls.

A. Resource Shortage Issues.

Little of sustainable value can be done to improve girls' primary education unless and until the larger issues of resource shortages in the education sector in general, and primary education in particular, are addressed. There are two main dimensions to this problem; getting a larger share of government spending for the education sector, and using these resources more efficiently. Both issues were identified in the PAIP and other studies of the education sector (e.g., World Bank, Supervision Mission Aide Memoir, 30 June, 1990, Price Waterhouse, Education Service Review, March 1988).

1. Lack of Resources

a. Needs: The resource needs of the education sector have their roots in the increasing demand for educational services caused by population growth, and as a condition for meeting government's goal of providing primary education to 75% of all Malawians in the primary school age group. Resource needs at the classroom level are seen in the following stark picture: an average pupil/classroom ratio of 86:1; an average pupil/teacher ratio of 67:1; a scarcity of learning resources such that most children do not have textbooks; exercise books seldom available in the numbers needed to meet minimum standards; classrooms without blackboards and chalk; children sharing pencils barely long enough to be held.

b. Budget Structure and Central/Local Issues: There are two basic categories of resource needs, reflecting budget structure in Malawi. Recurrent cost needs are expressed in the annual "Revenue" budget. Capital resources, needed to build the physical infrastructure of the primary education system, are budgeted in the Development Budget.

Over the years, there has been growth in both budgets, in response to the development needs of the country. However, growth has been limited and, in the case of the education sector, insufficient to meet needs. Most ministries, including the MOEC, have lacked the resources to undertake infrastructure development, with the result that few projects have been initiated at the national level without donor support. While there has been donor support for primary education's construction needs, it has not been sufficient to meet demand.

School construction can also be undertaken through grassroots' efforts, but even here the lack of institutional power, which has limited budget growth at the national level, has been a limiting factor. Locally supported development projects of a self-help nature require approval by District Development Committees; these committees try to satisfy many constituencies and needs, with the result that education projects have not fared well.

The recurrent cost budgets of all ministries have been under considerable strain in recent years. Salaries have been the only item receiving regular incremental increases. However, these increases have not permitted creation of new positions fast enough to keep up with the growing demand for teachers. Other recurrent cost items, such as learning materials, are not budgeted by MOEC. The funds to cover these costs are collected from parents at the local level by local government revenue collectors. Funds are deposited in accounts administered by the Local Education Authority (LEA), which is a legal entity of Malawi's system of local government, but there has been reluctance to raise fees commensurate with other price increases. Consequently, the educational resource base at the local level has not kept up with demand for consumable materials.

c. **GABLE and Education's Resource Needs:** Primary education has found itself in a long line of resource needers, at local and national levels, without sufficient institutional power to get to the head of the line. Consequently, primary education's share of the total budget has not kept up with demand.

Universally, teachers, women and children provide weak bases of political power, and this situation holds in Malawi. If primary education, and more specifically girls' education, is to move closer to the head of the line and receive a larger share of resources, extra help will be needed in the form of a broader power base. This help is not likely to come from within government, or even MOEC. Therefore, GABLE will create a lobbying force with the backing of a strong, national mobilization campaign, to create a better climate for expanding the base of both development and recurrent cost resources for primary education, and specifically for girls' primary education.

2. **Inefficiency of the Primary Education System:**

The second type of institutional constraint related to resources is the inefficiency of the primary education system. At least four sources of inefficiency have been identified in the system: (a) the repetition of standards by pupils, (b) missed opportunities to make use of double shifting of classrooms and multigrade teaching, (c) the lack of competitive bidding in the provision of goods and services, and (d) the inefficiency of teacher training colleges. Each source of inefficiency is analyzed below, along with proposed remedies.

a. **Repetition of Standards:**

1. **Current situation.** A major source of inefficiency is the problem of pupils repeating standards. This problem exists because, until recently, there was no clear policy regarding repeating, and no disincentives to repeaters. On the contrary, there has been strong incentive to repeat to improve chances of gaining admission to the limited number of secondary school places, awarded according to examination scores. The net result of persistent and widespread repeating is that it takes the primary education system 16 years or more to produce a graduate of an eight year program. This exacerbates the problems of crowded classrooms, high pupil/teacher ratios, and pressure on limited amounts of learning material.

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The solution to this inefficiency requires the following actions:

(a) registering all primary pupils;
(b) adopting a policy which sets strict limits on repeating any standard;
(c) creating a process to monitor whether the policy controlling repeaters is being implemented effectively.

MOEC has begun moving towards meeting these conditions. It has stated an intention to register all primary pupils by December 1992. At present, the Malawi National Examination Board (MANEB) has the responsibility for registering pupils for the Primary School Leavers Examination, and has begun the task at Standards 7 and 8. It is not clear whether MANEB or MOEC will have the responsibility for maintaining pupil registration records. As a consequence of a recently completed study of MOEC by the Management Services Division of DPMT/Office of President and Cabinet (CPMT, "Job Inspection Report of MOEC," January, 1991), there is a proposed reform of the inspection function in the MOEC which would give Inspectors of Primary Education at the District level the task of reviewing school records to see if a repetition policy is being implemented. However, at present, the District Inspection system is not able to carry out this responsibility because of staffing limitations and the lack of a data base system which includes all primary pupils.

MOEC has formulated a policy to base allocation of seats in secondary school on a formula of 75/20/5; with 75% of seats going to those who have not repeated Standard 8, 20% going to pupils who have repeated Standard 8 once, and 5% going to pupils who repeated Standard 8 more than once. This policy will be adopted for the 1992 intake for Form I.

There is no stated policy about repeating standards. In fact, there are no clear criteria on which to base a decision about repeating, nor is it clear who has the authority to decide whether or not a pupil will repeat.

2. **GABLE and proposed remedies.** To remedy the inefficiency due to repetition of standards, it is recommended that the following actions be taken:

(a) clarify which entity (MOEC or MANEB) will have the responsibility of registering all students and maintaining the registry; complete the initial registry of all primary school pupils according to MOEC's proposed timetable;

(b) set clear guidelines which establish the basis for determining whether a pupil may repeat a standard; establish a policy (including appeal procedures) which specifies who has authority for determining whether a pupil repeats, using the approved guidelines; establish financial penalties to be paid by parents who insist on having a child repeat (the penalty should bear some relationship to the real cost of a year of education for a given standard);

(c) implement the policy regarding the allocation of seats to Form 1 based on repetition of Standard 8.

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(d) specify which entity will have the responsibility for monitoring the implementation of the above policies (e.g., Inspection, Primary Education Administration, or MANEB).

It may be necessary to conduct studies to determine the best options regarding these actions. Consideration should be given to having the Centre for Educational Research carry out these studies.

b. Doubleshift/Multigrading.

1. **Current situation.** Doubleshifting refers to the practice of using school facilities to hold two schedules of classes on any given day, by having independent morning and afternoon shifts. This practice holds considerable promise as a remedy for getting extra use out of present facilities in urban areas. To illustrate: if all classrooms could be used on a doubleshift basis, the existing classroom gap in Malawi would immediately be eliminated without the expenditure of any construction funds if there were a sufficient supply of teachers to staff all classes.

Doubleshifting is a remedy in situations where enrollment greatly exceeds capacity, as is frequently the case in many urban primary schools. Informally, staggered shifts (two sessions overlap briefly in the late morning) are being used in some schools, but MOEC has not adopted doubleshifts, nor is there a clear policy for the use of this. Before developing such a policy, more study is needed to determine whether and how doubleshifting can be used to increase efficiency, and what special preparation a school needs to take to implement doubleshifting without undue negative effects. (One of the appendices to this annex contains Scopes of Work for potential studies which GABLE might support, including studies on doubleshifting and multigrading.)

Multigrading is the practice of using one teacher to teach in situations where the number of pupils per standard is quite low, as happens in some remote rural areas with low population density. Multigrading is reported to have been used informally, but MOEC has no official policy concerning this practice. Nevertheless, it offers some potential for using scarce teaching resources and classrooms more efficiently and should be studied to determine whether and how it can be put to use.

2. **GABLE and doubleshift/multigrading.** GABLE will assist MOEC in determining whether and how to use these methods to increase the efficient use of classroom space and teacher resources by carrying out needed studies, and if necessary, providing technical assistance to implement studies and policies. Consideration should be given to having the Centre for Educational Research carry out these studies.

c. Competitive Bidding for Goods and Services.

1. **Current situation.** A recent analysis of the system for purchasing and distributing learning materials to primary schools indicates that this system is very inefficient. (Draft: "The Distribution of Educational Materials to Primary Schools in Malawi": USAID, May 1991.) A major contributing factor to inefficiency is the lack of competitive procurement procedures for both the purchase

of materials and their delivery. Analysis also indicates that the administrative process for ordering materials and distributing them to individual schools is complex, resulting in considerable loss in time, and adding unnecessarily to costs.

In brief, the study referred to above describes this process in detail. Textbooks, on the one hand, and other consumable learning supplies on the other (exercise books, chalk, and blackboard paint) are ordered, paid for and delivered through different processes within MOEC.

What is needed to address this situation is a policy requiring competitive procurement procedures to purchase and distribute all learning materials, and a unified system of ordering, paying and distributing. The aim of the distribution system should be to have all materials delivered directly to schools by the delivery contractor before the start of classes. This would eliminate the problems of handling materials three or more times and causing redundant searches for transport by regional and district education officers, and headmasters, in a nation where access to transport is extremely limited.

A certain expertise already exists within MOEC's Project Implementation Unit (PIU) regarding the use of competitive procurement procedures for construction goods and services. PIU is responsible for acquiring textbooks and other materials for newly constructed classrooms, but resupply has been handled through other procedures. Since all the sources of learning materials in Malawi are in the Blantyre area, it may be advisable to consider having PIU handle this function for all resupply needs as well.

The Malawi Book Service (MBS) is a parastatal which now enjoys an exclusive role for supplying MOEC with learning materials which it purchases from producers in Malawi and countries outside Malawi. The distribution study referred to above has determined that MBS's service to MOEC has not resulted in efficiency or effectiveness. Under GABLE consideration will be given to having Malawian and foreign producers of texts, exercise books, chalk, and blackboard paint compete with MBS for the opportunity to sell these materials in Malawi. Similarly, MBS has been the primary distributor of materials to MOEC. Its transport costs appear to be considerably higher than costs would be if competed. Furthermore, MBS does not deliver materials directly to schools, which private transporters have indicated that they would, if given the opportunity.

2. **GABLE and Procurement Policies:** GABLE strongly supports MOEC's interest in establishing competitive procurement procedures. Given the complexities of the situation, MOEC may wish to seek outside assistance in analyzing and designing a new system to procure and deliver supplies in a manner which assures efficiency. Consideration might be given to using the Management Development Centre of the Polytechnic for this study, given its expertise and proximity to key parties.

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d. Training of Teachers.

1. Current situation: Another source of inefficiency in the education system is the underutilization of capacity in teacher training colleges. Inefficiency occurs for the following reasons: (a) lengthy admission and selection procedures, which result in students finding out about selection after they have made alternative employment plans, and (b) admission of residential students only, which means that the productive capacity of a teacher training college is determined by bed space rather than faculty capability. (Draft: "Utilization of Student Space in Teacher Training Colleges in Malawi:" USAID, June, 1991.) The present student/faculty ratio of 16:1 is not an efficient use of resources, and it is generally agreed that the ratio could be 24:1. A day-student policy, applicable to urban teacher training colleges will achieve this ratio without adding to capital costs and having only a slight effect on recurrent costs of the teacher training colleges.

2. GABLE and teacher training efficiency: Given the lack of primary school teachers, it is crucial that steps be taken to train more teachers at a lower cost per teacher. Such efficiency will have an important impact on the quality of education. Under GABLE the MOEC will create more efficiency in teacher training by requiring Teacher Training Colleges to develop and implement admission procedures and day- student policies which lead to a student/faculty ratio of 24:1 without increasing capital or recurrent costs in any significant way.

B. Inappropriate Attitudes about Girls' Education.

1. Pervasiveness of the Attitude Issue.

If the resource constraints discussed above were resolved, would there be a need for the GABLE program? The answer is found in girls' low enrollment and high drop-out rates in lower primary standards, low completion rate of Standard 8, extremely limited access to secondary schools, and tertiary institutions, and, ultimately, low rates of employment in the cash economy compared to men. What causes these low rates of performance?

One important factor is the negative climate concerning girls and their education--a climate that is supported by institutional policies and practices which are manifested in many ways. Girls doubt the utility of primary school and drop out. Parents reflect an attitude that girls' education has limited value by supporting or encouraging a drop-out decision, especially if economic circumstances force a choice between a son and a daughter as to who goes to school. Teachers, by their behavior, project an attitude about a low value of education for girls by favoring boys in classroom instruction. Learning materials which portray girls in passive roles, if at all, reinforce these attitudes. A curriculum that speaks primarily to the knowledge and skills that boys need foster these attitudes.

Secondary schools, teacher training colleges and other post-secondary institutions which have admission policies favoring boys over girls send the same message about the low value of education for girls. Finally, the imbalance between men and women in access to positions of authority in public and private sector organizations confirms that girls' education has limited value and rewards.

The curricula of primary schools and teacher training colleges institutionalize values about roles and behavior in society, and about knowledge and skills related to these roles and behavior. The curriculum is implemented through learning materials and activities, and if they show a gender bias, the bias is institutionalized in society.

Numerous studies concerning girls' education have documented the extent to which an institutionalized bias against educating girls exists in Malawi. Interviews by PAIP and PAAD teams with knowledgeable, sensitive officials generally concluded that if efforts are to have lasting impact on girls' education, they must include a strategy to address the issue of attitudes on many levels.

2. **GABLE and Attitudes: Social Mobilization Campaign:** The process of changing the attitudes of girls, parents, teachers, administrators, and policy makers about the importance of girls' education will be carried out through GABLE's social mobilization campaign. This campaign is the subject of a separate technical analysis. It is mentioned at this point to reinforce the necessity of looking at this issue as a pervasive constraint, institutionalized in formal and informal mechanisms throughout Malawi society in general, and the education system in particular. GABLE could not anticipate having an impact on girls' attainment in primary education without a comprehensive strategy for addressing this constraint.

III. PROBLEMS OF GIRLS' ACCESS TO PRIMARY EDUCATION

Girls have problems in gaining access to primary schools for a variety of reasons. A main reason cited in numerous studies is the cost which the family has to pay in the form of an annual school fee. Other reasons include concern over the distance to school (especially in rural areas), and belief on the part of parents that girls' education will not make a substantial difference in their lives or the lives of their daughters. The institutional implications of these problems of access, and how GABLE will address them, is discussed in the following analysis.

A. Costs of Education.

There are two dimensions to educational costs: the costs borne by the family, and the costs borne by government. The costs borne by family cover, at a minimum, costs of classroom consumables, maintenance, furniture, and a portion of textbook replacement costs. Families may be involved in bearing some of the costs of school construction if a self-help construction project is undertaken in a community. The costs borne by government are the costs of teachers (salaries and housing), costs of constructing

facilities and equipping new schools with textbooks, a portion of textbook replacement costs, and the administrative educational system.

1. **GABLE and Costs to Government:** It is the official goal of Government that 75% of all school age children will have access to primary school by the middle of this decade. As a first step in making access more affordable to the parent, MOEC plans to introduce in the 1991-92 school year a policy to waive the fee of Standard 1 pupils. Present plans are that each succeeding year tuition fees will be waived for another standard until the first four standards will have fees waived by 1994-95.

Reaching the goal of 75% enrollment will require substantially more resources than MOEC currently receives for primary education, since it is estimated that less than 50% of the cohort is in school. The main problem, therefore, from MOEC's perspective, is how to increase its share of government spending. Government has agreed that education's share needs to increase, but the budget allocation process is one of satisfying strong competing demands from all sectors.

Under the GABLE program the government will agree to increase the proportion of education's share of the total budget and, within that, primary education's share.

2. **GABLE and Costs to Families of Girls:** GABLE will address the family cost-access problem by initiating a program to pay the school fees of all girls in Standards 2-8 as long as they do not repeat a standard. Obviously this action also responds to problems concerning girls' persistence and completion of primary school, and will be mentioned again in the sections below where those problems are discussed.

The Accounting Section of MOEC has suggested several ideas for managing this process. Perhaps the most feasible is to establish a national bursary account for primary school non-repeating girls. The amount deposited to that account annually by Treasury would be based on the number of non-repeating girls from rural and urban schools, as reported by DEOs (District Education Officers) at the end of each school year. The Accounting Office might then transfer from the national bursary account to the recurrent cost account of each district an appropriate amount, based on the number of non-repeating girls enrolled in the district. The DEO would, in turn, credit the recurrent cost amount of each school in the district with an appropriate amount based on the school's data for non-repeating girls.

There may be other procedures for carrying out this process. The Accounting Office of MOEC has the capability to determine the most efficient way of putting this subsidy into effect, consistent with its emerging process of decentralizing financial management and control to "cost centers," which include all primary education districts. It will be necessary to devise a process which takes into account the role of Local Education Authorities (LEAs), and the

possibility of government waiving school fees for all primary school children. The Accounting Section of MOEC will develop a plan acceptable to Government and USAID for accommodating the intent of this subsidy.

As mentioned earlier, school fees are collected by local revenue collectors and deposited locally in branches of Malawi National Bank. Access to and use of these funds is based on agreement between the DEO and the LEA. Since the effect of GABLE's funds is to reduce cost to parents, LEAs would need to be notified of the amount credited to the DEO's budget, since that amount would not need to be collected locally.

Given the intention of waiving some portion of school fees, there is concern, expressed by many knowledgeable persons interviewed, that the cost of collecting school fees is high. Some speculated that with the waiver of some fees, the cost of collecting the remaining fees may exceed the amount collected.

The PAAD team was told that MOEC is considering changing what school fees are intended to cover. At present, 80% of the school fee is for tuition, which covers consumable items in the classroom. Almost all of the tuition is needed to pay for exercise books. The proposal being discussed is that exercise books would be dropped from coverage under tuition, and be made the responsibility of the family. Further, it is proposed that the entire handling of exercise books be turned over to the private sector, meaning that parents would purchase them from a local vendor, at whatever price the vendor chooses--assuming that there are vendors in remote areas of the country who want the challenges of predicting volume needed, arranging delivery, and storing exercise books--without the benefit of information about school registration numbers. This is a task that the education system has not been able to do, yet it is being assumed that a local shop keeper will be able and motivated to do it. This assumption seems unwarranted, on face value.

The PAAD team was also told that some local authorities are increasingly disturbed by the current arrangements concerning school fees and maintenance provision. Five percent of the school fee is to cover the cost of maintaining school facilities. Local authorities are responsible for maintaining school facilities. However, it has been reported that while a local authority, such as the City of Lilongwe, may be providing maintenance service to schools, it never actually receives the portio of maintenance fee from the LEA or the DEO.

In sum, there are a number of issues concerning the school fees which parents pay--issues that involve more than the question of limiting access to school. Therefore, it is recommended that GABLE carry out a comprehensive study of school fee collection and use, and the relationship of fees to problems of equity, efficiency, access and persistence for girls and boys. Consideration should be given to having this study carried out by the Centre for Educational Research or the Management Development Centre of the Polytechnic.

B. Location of Schools

1. Distance to School as an Access Issue for Girls: The distance which a girl has to walk to school is reported to be a factor affecting access. This seems to be particularly true if there is not a sibling to accompany the girl. At times, a girl's start in school may be delayed for a year or more to make certain that the walk to school is accompanied. This problem may exist in rural and urban areas, though it is said to be more of an issue in remote rural areas where there are long distances between existing schools.

In 1987 the Planning Section of MOEC carried out a mapping study in which distances to primary schools were determined within districts. The intent of the study was to develop criteria for helping to determine where new schools should be built. Since that time there has been considerable population growth and shifts, related in part to the refugee situation in Malawi. In addition there has been construction of schools and classrooms as a result of donor assistance and self-help activities at the local level. Consequently, it is felt by some education planners that the mapping study is out of date.

2. GABLE and School Distance as an Access Problem: The issue of distance to school as a barrier to access, especially for girls, merits additional study. It is recommended that consideration be given to updating the mapping study, at least in those districts where District Development Committees and Local Education Authorities have identified the dearth of schools as a major problem. This study might be carried out with local technical assistance, under the guidance of the Planning Division. Conducting the field portion of such a study might be undertaken as summer intern projects by university and TTC students.

Whether by using results of the mapping study update or some other means, it is essential that the issue of distance to school as a barrier to access for girls be given appropriate consideration when decisions are being made on constructing new schools versus building new classrooms. The institutional process through which these decisions are made is complex. As indicated earlier, construction of classrooms may be initiated at either the local or central level, depending on funding sources. In either case, both the District Development Committee and PIU are involved in the decision. Because of the additional administrative and economic costs of building a school, as opposed to adding classrooms at an existing school, priority is given to classroom construction. However, that decision may have relatively little impact on the issue of distance to school as a barrier to access, although it may have considerable impact on quality of education (as a function of classroom crowding) in areas with high density. In any case, it seems evident that current information about access to schools would be useful to the Planning Section of MOEC, PIU and District Development Committees.

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C. Access and Attitudes about Girls' Education

The attitude which parents (or other adults who make decisions about the education of a girl) have about the value of educating a girl has a bearing on how the factors of cost and distance to school are considered. Attitudes are the products of objective information about a situation (how much will it cost if school fees are paid under GABLE; what are the opportunity costs of starting school as opposed to working in fields or helping with household chores), as well as feelings about what others think about the matter.

Through the social mobilization campaign a major effort will be made to help decision makers (from the family to the national level) have better information about the importance of getting girls started in school at an appropriate age. The process by which this will be done, and the institutional considerations of this process are discussed in the social mobilization annex.

IV. PERSISTENCE IN PRIMARY SCHOOL: QUALITY OF EDUCATION

Data on girls' persistence in primary school indicate that there are serious problems which need to be addressed, if substantial increases in the rate of persistence are to be gained. These problems include: attitudes about the value of staying in school; costs of schooling; and the quality of the school experience in terms of the classroom environment and the relevance of the educational experience. In the aggregate they constitute the essential elements of the quality of education, as indicated in GABLE's supporting Objective B, in the Policy Matrix.

Since the essential institutional considerations of the attitude and cost issues have already been analyzed, along with remedies which GABLE will support, attention in this section will focus on issue of classroom environment and educational experience.

A. Classrooms

A visit to any public classroom in any district in Malawi quickly conveys what it may feel like to be a girl in a primary school, and to understand why many girls choose not to persist. In the lower primary standards most classrooms are crowded beyond any reasonable limit. For many students, classrooms are merely shady spots under a tree--an ineffective learning environment despite its idyllic image. Changing this situation involves (1) building more classrooms, (2) finding ways to build them at a lower cost, and (3) improving the maintenance of classrooms so they last longer.

1. Building more classrooms:

a. **The current situation:** A significant objective of GABLE is the MOEC's commitment to build classrooms and accompanying teachers' houses. In addition to GABLE's input to this need, classroom/teachers' housing construction is being undertaken at the central level through assistance from the World Bank and the African Development Bank. Classroom/teachers' housing construction is also going on as a consequence of local initiatives.

The capacity of PIU to coordinate and supervise the national construction effort was reviewed during the PAAD design. There had been concern about PIU's capacity, since development budget funds for classroom construction were not fully utilized recently. The bottleneck seems to have been, in part, the management of local contractors. With approval of government, PIU has recently hired additional professional staff, and has organized its supervision of contractors according to the contractors' construction and supervision capacity. As a result of these changes, PIU is confident that it is able to handle the increased construction workload which GABLE will bring.

Another area of concern is the need for better coordination between PIU and District Development Committees over their respective construction efforts. Coordination is needed in terms of sites, potential competition for limited material and resources and services of transporters, and assuring that local self-help groups use plans and materials which reflect best available technology.

b. **GABLE and Classroom Construction:** Under GABLE PIU will develop a comprehensive construction plan in the first year and updated annually throughout the program. The plan and updates will include World Bank and ADB construction obligations, plus PIU's role in construction for other education segments and parastatals, and involvement/coordination with primary school self-help projects.

2. **Lowering Construction Costs:**

a. **The current situation:** PIU uses a competitive bidding process to award construction contracts. However, recent awards were approximately 50% higher than the costs estimated by PIU staff. This represents a serous problem for Malawi, given the shortage of resources for construction, and the estimated classroom gap.

The dominant building material in classroom construction is brick, and the current technology emphasizes kiln-dried bricks, which can be made at the work site through local efforts, or purchased from a commercial brick maker and transported to the work site. There are growing environmental concerns about the impact of woodburning for drying bricks, especially those made on site by local self-help efforts.

An alternative may be to search for other technologies that are appropriate. Use of sun-dried brick, reinforced with Portland cement, and covered with a protective coating inside and out is reported being used in other parts of the world with needs and conditions similar to Malawi.

Instead of metal window frames and glass windows, which are not made in Malawi, there is increasing use being made of "breeze blocks," which can be made on the construction site, or provided by commercial producers. These materials have the potential for reducing construction costs and simplifying construction, and have lower recurrent cost implications for schools.

Roofing materials are a major cost component if metal roofing material is used, since it is imported. An alternative technology based on concrete roofing tiles has been developed and is being used in low cost housing in Malawi with considerable success. The use of this technology for classrooms has not been fully explored, but merits investigation due to the cost saving potential.

b. **GABLE and Construction Technology/Costs:** It is recommended that GABLE encourage MOEC/PIU to explore and experiment with alternative technologies of construction which have potentially significant cost and environmental impacts. While the pressure for getting more classrooms on line is tremendous, cost and environmental pressures cannot be overlooked. GABLE resources can be used to promote studies through the Polytechnic and other local sources, and to sponsor study tours to locations where better technologies, appropriate to Malawi's situation, are being used.

B. Teacher Availability

Teachers affect educational quality through their availability (pupil/teacher ratio), and their methods and behaviors in teaching and maintaining a learning environment. In this section issues concerning availability will be discussed. Issues concerning teacher behavior, as a factor of educational quality affecting persistence of girls in primary education will be discussed in the section below dealing with curriculum implementation.

1. **Expanding Availability:** As seen in the data about pupil/teacher ratios, there simply are not enough primary school teachers in Malawi to meet the need in all areas of the country. In a preceding section, recommendations were made that would expand the output of teacher training colleges by improving the efficiency of their operations. However, expanding enrollment in conventional teacher training programs is not the only way which Malawi can address its shortage of teachers, and thereby affect the quality of education and the persistence of students. Other options need to be explored.

a. **MASTEP:** Another source of teachers is an experimental program (MASTEP) being carried out with World Bank assistance. If this program is effective, continued support for it should be considered, especially since it is more attractive to women who may already be married and living in a community where they will become teachers.

b. **Radio assisted instruction delivery:** With limited resources to meet the recurrent costs of having enough teachers to meet an acceptable pupil/teacher ratio, the MOEC should undertake studies to consider other means for delivering instruction.

The PAIP suggested the possibility of radio-based instruction delivery as a means of providing instruction. The assumption was that the area of instruction to be delivered through this means was lower primary curriculum. The use of radio for instructional delivery, supplemented by printed learning materials, has been found to be cost effective in other countries. The required

infrastructure of radio saturation, and print materials is the process of expansion through a World Bank funded project. The experience of the Malawi College of Distance Education (MCDE), which has the responsibility for this type of instruction, indicates very clearly that the social demand for alternative educational delivery systems exists, at least at the secondary level. However, MCDE cannot keep up with the present demand, and does not have the capacity to develop and deliver any primary level instruction.

c. **Retired teachers:** Another source of teachers for primary schools is the pool of retired teachers in Malawi. Some twenty five years after independence the pool of retired teachers is likely to grow assuming that hiring of teachers began to increase after independence, and that most teachers hired were fresh out of training programs. Current policies permit MOEC to grant exceptions for teachers to the requirement that all government employees retire upon reaching age fifty. However, the granting of such exceptions is just that--exceptions--and the bulk of teachers who reach retirement age retire. Given the growing crisis in meeting the demand for teachers, and the cost and length of time needed to train teachers, it is advisable to consider policy options which include changing the mandatory retirement age for teachers, and creating a "retired teachers corps" of those who wish to retire, but are available for part- time teaching for nominal compensation.

d. **Teacher housing as a constraint to expanding availability:** Another factor which affects teacher availability at a given school is the availability of teacher housing. Government policies require that suitable housing must be provided before MOEC assistance (in the form of a teacher) is given. Many communities try to build teacher housing on a self- help basis, in hope that MOEC will be able to hire and post a teacher to their community. All new construction of classrooms and schools being funded by donors includes construction of teacher housing.

Clearly, in rural communities where adequate housing is in short supply and teacher recruitment without adequate housing may be impossible, the requirements of providing houses for teachers seems justifiable. However, as a national policy, this requirement may carry an unnecessarily high cost. The cost of building a teacher's house to the specifications of PIU is the same as the cost of building two classrooms. And for every two classrooms, there is a need for a teacher's house. So, the resource requirements for meeting the nation's classroom gap has a built-in cost escalation factor of 50 percent.

As the sources of teachers include more alternatives such as MASTEP, and as more demand for urban classrooms grow, where there may already be a housing supply at a much lower cost that the cost of new construction, it becomes advisable for government to consider other options. It may be better for primary education, in terms of the quality of education, that limited resources go into training more teachers, or into paying teachers higher salaries and letting them make their own housing arrangements, rather than putting more resources into brick and mortar for teacher housing. Therefore, it is recommended that a study of teacher housing policy be carried out to be coordinated with classroom construction planning.

e. **Other factors:** This analysis of teacher availability does not consider other institutional factors which affect availability because it is reported that there is an ample supply of persons who wish to become teachers. While it may be true that MOEC needs to take actions recommended in the DMPT study to improve the administration of human resources within the education sector, the stark reality is that the fundamental issue is one of meeting demand and recruiting persons to become teachers, not of keeping teachers.

2. **GABLE and Teacher Availability:** It is recommended that under GABLE the Planning Section of MOEC plan and initiate studies which identify means to overcome teacher shortages.

GABLE should support an evaluation of MASTEP and consider supporting its continuation and expansion, if the evaluation recommends such actions, and if the Bank does not continue the program. Further, it is recommended that GABLE support policy research concerning the conditions under which government should require housing for teachers, or have other forms of material support, such as higher salaries for teachers.

It is recommended that GABLE support a feasibility study of radio based instructional delivery to see if this approach is feasible and has a positive cost-benefit relative to other teacher production and instruction delivery options.

C. **Learning Materials**

The dearth of learning materials in Malawi's primary schools affects the quality of education and the persistence of pupils. Maintaining a passion for learning is extremely difficult when the only or main source of intellectual stimulation is the voice of the teacher.

1. **How Many and Which Ones?** As previously noted, the main reason for the shortage of learning materials is the shortage of resources to buy and distribute them. Policy reform suggested earlier will have an impact on the supply. A key issue which MOEC and GABLE need to address is how much to expand the availability of learning materials, and precisely which materials should be made available with GABLE assistance.

a. **The current dilemma:** This issue is complicated by the fact that there are no clear guidelines, with pedagogical rationale as well as economic rationale, concerning a ratio of learning materials/pupil. A goal of each child having her own complete set of materials is obviously unattainable, economically. However, how many pupils can share a textbook before sharing reduces the effectiveness of learning? Can the scheduling of learning activities be structured in a way that a limited supply of materials can serve a larger pupil population? These questions need consideration for MOEC and GABLE to reach agreement about funding for purchase of learning materials.

By subsidizing the school fees of non-repeating girls, GABLE is putting resources into the learning material supply budget. But, will those funds raise the level of learning materials in the classroom high enough to have a measurable impact on the quality of

education and the persistence of girls? If not, how much more should be spent on learning materials as opposed to being spent on classroom construction or changing the attitudes of people about the value of girls' education.

In addition to answering these questions, MOEC and GABLE need to answer questions concerning the supply of textbooks--obviously the most important form of learning material. This matter is complicated by the fact that curriculum reform is leading to the design of new textbooks, some of which will be funded by other donors. Not all new textbooks have donor support, which means that there are likely to be shortages in certain areas of study. Are any of these appropriate for GABLE support, given the focus on girls' education.

But curriculum reform will take more than five years to develop and test new materials and get them into the classroom. In the meantime, should schools be resupplied with new copies of old textbooks? If so, which of these are likely to have most impact on keeping girls in school?

b. **GABLE assistance:** It is apparent that there is a need for further research and guidance before the questions posed above can be answered. Study funds under the GABLE budget might be used for these purposes, and students from teacher training colleges and the Education Department of the University might be used to carry out research under the guidance of the Centre for Educational Research, the Planning Division of MOEC, or MIE. When studies have been completed it may be useful for MOEC and GABLE to sponsor workshops involving educators, donors and other concerned parties to review findings and reach consensus about courses of action.

2. **Lack of Appropriate Storage:** Having increased the supply, primary schools need to take steps to assure that the supply is cared for in a way that results in a longer life span of materials. Reports have indicated that very few schools have proper storage facilities for learning materials. Some new classrooms are being built with storage capacity, but it is not a design requirement that all classrooms have storage facilities. It is reasonable to assume that distribution practices are likely to be changed if the distribution system is reformed along the lines suggested earlier. This may mean that all learning materials may arrive earlier in the school year (perhaps even before classes begin), and in greater quantity than previously, creating a need for storage capacity.

It has been noted that some headmasters have taken the matter of caring for learning materials too seriously, and have unnecessarily restricted their use. This type of behavior seems to have been caused by inspection criteria and reporting that put more emphasis on the storage of materials than their use.

GABLE Assistance

Under GABLE the MOEC and USAID may wish to deal with the storage issue by discussing with PIU the possibility that all newly built classrooms include adequate storage facility. Further, GABLE could assist PIU in commissioning a special study to design an inexpensive

but effective storage unit which could easily be retrofitted into existing classrooms or other buildings. Such a design project, perhaps as a contest among engineering students at the Polytechnic, followed up be demonstration assembly projects in each district, could have a significant impact on prolonging the useful life of learning materials and reducing recurrent costs.

3. **Learning Material Content and Teacher Methods:** Learning material content and the methods and behaviors of teachers in using the material have been identified as factors affecting the quality of learning and the persistence of girls in Malawi. Contents and methods constitute the core of curricula, and in the following discussion about the primary education curriculum, both are assumed to be included in the analysis.

a. **Current Curriculum Situation:** Numerous studies referred to in the PATP indicate that the curriculum in primary schools has been perceived by girls and their families as having little relevance to the realities facing girls. Curriculum content has emphasized areas of study which reflect the content of the Primary School Leavers Examination, rather than the "examinations" of life.

Growing awareness of this situation has led the Malawi Institute of Education, the entity responsible for the content of primary education curriculum, and donors to undertake an extensive and comprehensive reform of primary education. The intent of the reform is to develop a new curriculum based on community orientation. That is, the content will seek to focus cognitive development on areas essential to understanding the character, activities and needs of communities in Malawi, and on skill development appropriate to this understanding.

The reform of the curriculum is underway, with the development of new syllabi and learning materials being prepared on a standard by standard basis. The new Standard 1 curriculum is currently being field tested, and the new Standard 2 curriculum is being developed this year. In each of the following years another standard will be the focus of revision, including all learning materials and teacher guides associated with the curriculum.

In addition to the development of learning materials for the new curriculum, new syllabus preparation is intended to include extensive new learning activities which teachers and pupils will engage in to give the community-based curriculum a tangible sense of reality. Many of these activities will involve interaction with community life, to assure skill and attitude development which complement cognitive content.

By focusing on new community-based activities it is hoped that the method of instruction, and the behavior of teaching in directing learning will make learning more relevant. Increased relevance, it is assumed, will convince girls and their parents to persist in school.

It is likely that the new primary curriculum will be the vehicle on which the knowledge, skills and attitudes of the next generation of Malawians will be based, and it is therefore essential that it address needs which will help all Malawians reach a higher standard of individual and national development.

PAAD team review of new learning materials and discussions with curriculum design teams and other educational professionals who have knowledge of the new curriculum have indicated a need for additional input into the development of the new primary curriculum, learning materials, and suggested activity lists. The needed input is directly concerned with assuring that the curriculum appropriately reflects the educational needs of girls. These needs can be summarized as follows:

(1) learning content which recognizes and values the roles of women as full and equal partners in the development of the community and nation;

(2) learning activities which promote competence of girls to engage in a wide range of important activities within the community;

(3) a learning climate that projects an attitude about girls which makes them feel that education will give them the opportunity to grow as much as it does their brothers.

These needs can be expressed as the need for gender appropriateness or gender sensitivity in the curriculum. This should not be interpreted as a need that relates exclusively to girls, but rather as a need that relates to both girls and boys in ways that are equal, and in ways that are specific to each when such specificity is appropriate.

b. **GABLE: MIE Gender Based Capability:** GABLE can have a significant and timely impact on assuring that the new curriculum is gender appropriate and sensitive. GABLE will provide technical assistance and other resources to the Malawi Institute of Education to develop the capacity to assure that the new community-oriented primary curriculum is gender appropriate and gender sensitive, and that all learning materials (textbooks, teachers' guides, etc.) reflect the same concern. Since MIE is responsible for the development of curricula for Primary Teacher Training Colleges, this concern should also be reflected in the curricula of those institutions. And, since MIE is responsible for the development and implementation of inservice training plans and materials, this concern should also be reflected in inservice activities.

In brief, GABLE will help MIE address the issue of inappropriate attitudes about girls and their education through the institutionalized mechanisms (curricula, learning material and training) for which it has responsibility.

This may involve assistance in creating a new unit within the Institute to carry out these activities, including financial assistance to add at least two appropriately qualified professionals to staff this unit, as well as technical assistance to help design

and implement a work plan for the unit which complements and is coordinated with the curriculum development work of other staff. Additional staff is needed because present staff loads preclude adding the new work load to existing staff assignments. However, it is not anticipated that any additions to support staff will be needed.

It is recommended that a special unit be created for the purposes indicated above, rather than attempting to integrate this new function into existing units, whose workplans are underway. By creating a special unit, the importance of the function is emphasized and the special character of its labor is protected, supported and recognized.

As indicated earlier, MIE is receiving assistance from other donors to develop the new curriculum and related textbooks. MIE has the organizational capacity to utilize assistance of this nature well, and it provides a physical and intellectual setting that is conducive to utilizing project assistance. The Institute has good working relations with other organizations in Malawi which share responsibility for improving the quality of primary education.

V. COMPLETION AND TRANSITION

The operational definition given to the objective of GABLE includes helping more girls complete primary school, and successfully make the transition to post-primary life choices.

The preceding policies and activities which GABLE will support should enable more girls to access primary school, and to have the financial means and motivation to stay in school longer. Will this be enough to assure higher completion rates? It may not be, given the other pressures that girls experience when they are of upper primary school age. These include pressures for marriage and other family responsibilities, which are had to resist unless one has clear goals about completing primary school.

A. Increased Access to Secondary School

An obvious goal for completing primary school is to enter secondary school. However, this is not a realistic goal for most girls, given the restricted access for girls. As more girls persist in primary school, it is necessary that government policies regarding girls' access to secondary school be reviewed. Under GABLE the MOEC will increase the percentage of places allocated to girls for access to secondary schools. Similarly, Malawi College for Distance Education could be assisted in expanding its capability to serve the needs of more girls through its programs.

B. Career Guidance and Information

Development of a community-oriented curriculum, and community-focused learning activities may increase girls' awareness of roles available to them if they complete primary school. However, to assure an increased awareness of opportunities, and to assist in the creation of new opportunities, it may be necessary to strengthen the capacity of organizations to reach primary school

girls in a systematic manner with information about career choices. Experience in other countries, including the United States, has shown that affirmative action is necessary to provide females with equal opportunity to jobs.

MOEC has a unit with responsibilities for career guidance. However, in the DPMT study referred to earlier, it was recommended that this function be abolished, since it has never been adequately implemented. This recommendation should be reconsidered in the light of the need to create a more appropriate attitude about girls education, and the relationship between education and career options.

It should also be noted that the DPMT study recommends restructuring of the role of Home Economics Inspectors in the Inspectorate Division of MOEC. On the one hand, this is a welcome recommendation because it represents a view that this role is a resource capable of carrying out a much broader set of responsibilities than it currently has. On the other hand, redefining the role at the time when the career guidance role may be abolished means that there no longer is any place within MOEC to strengthen the capacity of providing girls with career information--information that may help motivate them to complete primary school and seek meaningful life options if secondary school is not a choice.

MOEC is not the only agency with capacity and interest in reaching girls with information about post-schooling choices. MOCS, CCAM and the Ministry of Agriculture, to name a few, as well as other non-governmental and private organizations have activities to reach girls with messages to improve their lives. What needs to be studied are ways to bring this information to girls while they are still in school so that they see the completion of primary school as a means to better options.

Therefore, it is recommended that a study be undertaken to reconsider the recommended restructuring of MOEC, as it relates to providing girls with career information and guidance, and to seek ways to develop a more effective network among agencies working with girls about career choices and developing awareness of new role models for girls. Consideration may be given to having this study carried out by the Women in Development program at the University of Malawi, or through the Centre for Social Research. Coordination of this study with the social mobilization campaign may be advisable, as well as coordination with development plans of the National Commission for Women in Development.

VI. QUALITY CONTROL MECHANISM: MOEC/INSPECTORATE

All systems need a mechanism to indicate how well they are meeting system goals. In the Malawian primary education system there is a need to develop a strong and effective quality control mechanism which can determine whether the curriculum is being taught effectively, whether teacher behavior is consistent with curriculum goals and methods; whether classrooms are overcrowded, whether pupils have the proper amounts of learning materials and whether these materials area being well used and cared for; whether the school facilities are being cared for properly; and whether school records are being properly maintained.

To accomplish this function requires that someone make frequent visits to schools and prepare accurate reports. These reports then need to reach the attention of someone who has the authority and resources to take corrective action, when necessary.

A. **Current Situation Regarding Quality Control**

Analyses of this function in studies referred to earlier, as well as through the PAAD analysis, indicate that this function is not performing well at present. The result is an institutional constraint to determining whether efforts to improve the quality of primary education are having the desired effect. Since a major effort is underway through collaborative efforts of MOEC and donors to construct classrooms, to train more teachers, to revise the curriculum and develop new learning materials, it is essential that the quality control "loop" be completed by overcoming this constraint and strengthening the capability of what is called the inspection function in MOEC.

1. **Proposed Roles Under Decentralization:** MOEC has identified the need for strengthening the inspection function as one of its goals, to be accomplished as part of its process of decentralizing management functions. A plan has been developed to reorganize the inspection function and to transfer primary responsibility to the district level. The role of headquarters would evolve into one of "methods advisory services," facilitating the development and delivery of training and other actions to overcome reported needs. In addition, headquarters will be responsible for reviewing policy which relates to educational quality.

Through decentralization of the inspection function, is the intent of MOEC to develop a school-based inspection capability. This will involve adding to the duties of headmasters the responsibility of conducting classroom audits. Previously, this was the responsibility of the District Inspector, but limitations of staff and transport resulted in classroom audits occurring very seldom. There are reports of some teachers never having been inspected in ten years.

The role of the District Inspector will, under the proposed plan, evolve more into a trainer of the headmasters regarding classroom inspection, and will allow inspectors to focus on other indicators of educational quality, such as analyzing the school and district data on repeating, and on the supply and distribution of learning materials.

2. **Need for Comprehensive Implementation Plan:** Despite having identified the need to strengthen the inspection function as the "eyes and ears" of MOEC, there is not a comprehensive plan to carry out a strengthening effort. The World Bank is providing some resources through the Second Sector Credit to hire more inspectors and acquire motorcycles. The UNDP Project for Strengthening the Educational Planning and Management, under which MOEC is implementing decentralization, confirms the need to strengthen MOEC's Monitoring and Evaluation capacity, and has begun work on

developing indicators of educational performance which will be used to measure school performance. However, there is not at present assistance from any donor to assist MOEC in developing a comprehensive plan to strengthen the Inspection function.

B. GABLE and the Inspection Function

It is recommended that a study be carried out under GABLE to plan the actions needed to make the inspection function within MOEC, from the national to the classroom levels, a viable, effective system.

VII. SUSTAINABILITY

A. General Concerns About Sustainability

Policies and programs are sustained as long as their perceived benefits continue. GABLE activities will serve as a lobbying force for a greater share of resources to education, primary education and girls. Some activities of GABLE may need to be continued after program and project support end, since the primary beneficiaries of GABLE--girls in primary school--lack the political clout needed to maintain resource allocations. It must be assumed that continued population growth will cause continued competition with other sectors for scarce resources. Indeed, it may be anticipated that the success of GABLE will cause tremendous competition for resources within the education sector, by escalating the demand for access to secondary schools.

This also suggests that at some point during GABLE, when the indicators suggest that GABLE is having the desired impact, it may be necessary to consider broadening the strategic objectives of GABLE to include girls access to and persistence in secondary school.

Continued growth of demands in the education sector also suggests that at some point it may also be necessary for the MOEC to focus attention on the policy framework upon which budget support for public education is based. Can the costs and benefits of public education be sustained through funding from central treasury, or must alternative or complementary funding sources be developed? And if so, where are there likely to be sources of funding which perceive a benefit from supporting education?

One source is likely to be the community, assuming that the community-based curriculum being developed for primary education is successful. If community support is to be seen as an alternative or complementary source of funds, the efforts of MOEC to decentralize its operation becomes very important. In the decentralization plan, considerable power will have been delegated to the district level. This includes financial management power and power to monitor the quality of education and address its shortcomings through the inspectorate function.

By giving the district education office the power to make education more responsive to the needs of the community, it is likely that the community will be more supportive of education costs, either through property rates, employer taxes, parental paid fees, or some combination of these and other sources.

B. Operational Considerations of the Steering Committee and Secretariat.

Note: This section requires discussion with GOM.

GABLE's success in helping the education sector gain a greater share of resources and having some of these resources affect girls' education will depend on the ability to overcome institutionalized constraints through systematic efforts to shape discussion around policy issues of girls' education, and to change the attitudes and behavior of those who make resource decisions concerning girls' education. In other words, GABLE needs a strong lobbying effort, backed by visible support of political and community leaders who have a commitment to improving girls' educational attainment. The lack of this kind of policy support mechanism is a constraint, given a resource scarce environment, and the creation of it directly addresses this constraint and will influence policy outcomes.

Suggested membership for the GABLE Steering Committee is as follows: the Principal Secretary of MOEC as Chairperson, the Principal Secretaries of MOCS, CCAM, the Director of the National Committee for Women in Development, the Principal of MIE, at least three female members of Parliament, the chief executive officer of the Malawi Business and Professional Womens' Organization, the heads of missions of donor agencies with substantial commitment to primary education, and other national leaders with demonstrated commitment to girls' welfare and to primary education. The total membership of the Steering Committee should not exceed fifteen. The Steering Committee will meet quarterly to review progress made in carrying out GABLE activities, to plan activities which it can sponsor and to assure appropriate discussion of policy issues related to girls' education, and to propose recommendations to government for policy support for primary education and girls' education.

The Secretariat of GABLE will be responsible for day-to-day coordination of all GABLE activities. It should be organizationally independent of MOEC and other government entities in order to have full freedom of action and to assure continuity of staff. Since most of the operational issues which it will be concerned with are in the Souther Region, it is advisable that the Secretariat be located in Zomba or Blantyre. It is recommended that the responsibility for managing the day- to-day affairs of the Secretariat be shared by two co-directors, one of whom may be an expatriate technical assistant. A brief description of qualifications and duties, as well as budget for the Secretariat may be found in an Appendix to this Annex.

Working relationships among USAID, Secretariat, Steering Committee and other GABLE activities might best be managed through a Working Group involving the USAID GABLE manager, the Secretariat co-ordinators, the director of the social mobilization campaign and a designee from the MOEC representing the Chairperson of the Steering Committee. The Working Group might meet weekly or biweekly to review plans and activities, to assure that necessary actions have taken place in a timely manner, to identify and resolve coordination problems, and to keep USAID, the Steering Committee and MOEC appropriately informed and involved.

VIII. TIMING AND PHASING

One specific example of the needed coordination between components will illustrate the importance of this issue. The social mobilization campaign creates enrollment demand, which creates demand for more and better facilities. The PIU creates supply of classrooms, and PTTCs create the supply of teachers. MIE creates curriculum relevant for girls' education, which is an issue related to retention of girls.

Each of these units' activities has a critical path which will determine the shortest time for completion of its primary task (conduct a campaign, build classrooms, produce teachers, develop a gender appropriate curriculum, delivered by appropriately trained teachers). There is a critical path which combines all activities and indicates proper choices about time and place for activities to occur. For example, if Machinga is used as a location for piloting the social mobilization campaign, it needs to be determined whether the assumed increase in enrollments caused by the social mobilization campaign will create demand for classrooms and teachers in Machinga which would cause deterioration of the indicators of pupil/teacher ratio and pupil/classroom ratio in that district. If this determination is made, then appropriate corrective action (build more classrooms, supply more teachers) must be planned and completed when the increasing enrollments occur.

Similarly, if Machinga district enrollments increase as a result of social mobilization, it would be a logical place to see whether new curriculum and teaching behaviors are being practiced in such a way as to effect retention of girls, given that cost to parents will have been eliminated through school fee payment by GABLE and MOEC policy. To test whether the new curriculum and appropriate teaching behaviors are being used and having the desired effect requires that inspectors in the Machinga district will have been among the first trained to carry out the new inspection procedures.

Along the same lines of argument, if it is assumed that effective implementation of MOEC's decentralization of the integrated financial management and EMIS system will result in DEOs being better able to forecast and manage resources, then Machinga district education staff should be among the first trained to use the new system.

An example of coordination within a component will be seen in the creation of a Gender Based Curriculum Review and Training Unit in MIE. SInce curriculum development is a highly interactive and sequential process, lengthy delays can occur when one element, such as the planned new unit, is not completed in a timely fashion. The accumulation of delays can escalate into year long delays because curriculum introduction takes place on an annual basis, rather than an ongoing basis.

To bring all these matters together into a critical path will require considerable coordination skills and authority. An important reason for the GABLE Secretariat being independent of any government organization is that it will be free to focus on one issue--implementing GABLE--and not have the attention of decision makers diverted to other pressing matters competing for attention within the organization. It will also be free to take initiative to anticipate and solve problems, without having to wait for approval from an official who may be out of the country on important business.

In short, timing and phasing of interdependent factors are crucial to the success of GABLE. Because many of the activities needed to be coordinated are in different organizations, successful phasing of coordinated activities will occur only if there is strong leadership, and a carefully developed workplan covering all the critical points in time at which coordination of outcomes are expected to happen.

IX. RECOMMENDATIONS

As indicated in the first section of this analysis, many of the typical recommendations found in an institutional analysis are not found here. The key organizations involved in implementing GABLE are basically sound. MOEC has initiated a plan for significant reorganization, and GABLE can and should support this plan in ways discussed, since such actions have a direct bearing on policies and programs supported by GABLE. The main focus of institutional strengthening is on the creation of a capacity to influence resource allocation--an activity that is not centered in any one specific organization.

The main recommendations concern the creation of capacity to influence resource allocation and attitudes of key decision makers, and by this action overcoming the primary institutional constraints to GABLE's overall objective. These recommendations are:

1. Develop a politically strong, organizationally competent lobbying force to maintain political pressure on resource allocators, define the policy agenda, and support efforts generally regarding girls' primary education; §Discuss with GOM.é

2. Launch and maintain throughout GABLE a systematic campaign to change attitudes in key groups about the importance of girls' education;

3. Strengthen the institutional capacity of the Malawi Institute of Education to develop and implement gender sensitive curricula for Standards 3-8, for Primary Teachers Training Colleges, and for inservice training for Education Officers, inspectors, headmasters and teachers;

4. Strengthen the capacity of MOEC's inspection function at the regional and district levels to monitor and evaluate efforts to improve the quality of education in the primary schools in Malawi, and to take appropriate corrective action when needed. §Discuss with GOM.é

In addition to these recommendations, GABLE should seek to have an immediate impact on the quality of education by building more classrooms, training more teachers, and making more learning materials available. Financial constraints which affect access and retention of girls should be reduced under GABLE to cover all school fees for girls who do not repeat standards.

Finally, GABLE should assure that funds are available to carry out necessary policy studies and subsequent decisions which will result in increased efficiency throughout the education system.

ANNEX J

SOCIAL FEASIBILITY ANALYSIS

SEPTEMBER 30, 1991

SOCIAL FEASIBILITY ANALYSIS

I. Introduction

The Girls' Attainment in Basic Literacy and Education (GABLE) program aims to improve girls' access and persistence in basic education in Malawi. The principal target group of the GABLE program is girls of primary school age. Additional target groups include the parents and guardians of primary school age girls and the communities of which they are members, and the representatives of the educational system who are most concerned with planning and implementing primary education for girls in Malawi: teachers, headmasters and deputy headmasters, school inspectors, teacher trainers, and curriculum development specialists.

GABLE's approach to each of these additional target groups consists of providing them with resources and affecting them in a manner that will increase the flow of benefits they provide to the primary school age girls that are GABLE's principal concern.
Each of GABLE's components focuses on these target groups through program and projectized interventions with an overall view toward increasing girls' access to education, the support they receive from their families for participating in education, and improving girls' persistence and success once they enter the primary education system.

Section II below examines the situation of women in Malawi. Section III considers principal patterns and constraints connected with womens' and girls' participation in the educational process, and summarizes the principal problem areas that GABLE has been designed to address. Section IV assesses the social feasibility of GABLE's components that have been designed in relation to each of the objectives that support the overall objective of improving girls' attainment in basic education.

II. Women in Malawian society

A. Women and social reproduction

Women, who account for 52% of Malawi's native-born population, typically marry at a young age (17 years of age on the average) and thus become further incorporated within a socio-cultural system where child-bearing in marriage is an "essential aspect of a woman's identity, status and sense of worth" (UNICEF 1987: 23). Once married, women in Malawi often bear children well into their 40s, giving birth, on the average, to 7.6 children during their reproductive years. These high fertility rates contribute to a rate of population growth in Malawi that is currently estimated to be 3.2 % per annum. Fertility rates are slightly higher (7.6) among rural women (the urban rate is ca. 7.2) who comprise about 90% of Malawi's female population.

The lot of Malawi's children that result from these high fertility rates is not an easy one. An estimated 150 children per 1,000 born die before their first year, and one in four children dies before attaining five years of age (Economist Intelligence Unit 1991: 7-8). As a result, Malawi has one of the highest infant mortality rates in the world.

This loss of life is largely explained by nutritional deficiencies (with chronic malnutrition affecting 65% of children in some areas), which makes children particularly vulnerable to a host of child killing diseases. The link between widespread nutritional deficiencies among children and poverty among the families in which they live, and which accurately characterizes almost half of Malawi's population, is probably very strong (UNICEF 1987; Sahn et al. 1990; cf. World Bank 1990a).

B. Womans' contribution to Malawi's agricultural economy

While women in Malawi invest, like women in agricultural societies throughout the developing world, a great deal of energy in bearing and rearing children, they also must provide for a host of daily needs of children, husbands, and other family members, and are additionally responsible for a large number of time- and energy-consuming domestic tasks that continue year- round and range from cooking to fetching water and firewood. What is more, women are household heads in 28% of Malawi's households, and thus are solely or largely responsible for dealing with the needs of all household members in a sizeable portion of Malawian society.

Women also farm in Malawi, and account for some 70% of all full-time and 35% of part-time farmers in the country. Overall, about 93% of all women are involved in some kind of agricultural activity. Women farm as smallholders on family plots whose average size continues to shrink nationally as a result of growing demographic pressure, and under conditions where access to productivity-enhancing inputs, extension and credit is often severely limited.

Women also work outside their families as local agricultural wage laborers. During the past decade, increasing numbers of women have worked as laborers on estates, producing and harvesting tea, coffee, tobacco and macadamia nuts. Currently, women may provide more than a third of casual labor on leasehold estates in Malawi, and, together with children, provide over 50% of casual labor on estates (Mkandawire, Jaffee and Bertoli 1990: 73-75). Not surprisingly, women workers on estates are often paid less than men for the same tasks.

C. Contexts of high fertility in Malawi: material constraints and socio-cultural values

Judging from the average age at first marriage and overall fertility rates, this decidedly pro-natalist value system in Malawi appears to span regional and rural-urban differences in the country. At the same time, women as a whole appear to have little knowledge about

limiting conception. A 1984 survey suggests, for example, that only 4% of all women and 2% of rural women knew about the most familiar method of contraception at the time. Knowledge aside, however, it is important to note that 99 continuing high fertility in Malawi reflects practices that are informed by values and attitudes that are linked to factors having a complex interrelationship in Malawian society.

1. Material constraints

One of these factors concerns how resources are mobilized by Malawi's overwhelmingly rural, and largely poor inhabitants as they seek to survive and get ahead in pursuit of their livelihoods (Hirschmann and Vaughan 1984; World Bank 1990a). Comparative analysis of demographic growth in other African countries has repeatedly shown that agrarian populations which confront a scarcity of productive resources often resort to high fertility (Cleveland 1986; Gregory and Pinche 1981; Handwerker 1986; Mamdani 1973).

Despite its potentially negative long-term implications, high fertility functions in the short and medium term to produce labor and thus increase aggregate agricultural production, broaden the subsistence base by increasing the numbers of participants who earn and share real income (one form of indigenous risk- management), compensate for losses caused by infant mortality, and increase overall access to the crucial safety net that social and kinship networks provide (Ibid.).

2. Socio-cultural values and gender structuring

a. Values and "normal" social roles

Another factor concerns what appear to be widely shared and very strong notions within the state- and male-dominated society of Malawi concerning what is acceptable or "socially normal" relative to the roles of females in all areas of the socio-economic and cultural subsystems that constitute Malawian society.

The result is a pervasive set of assumptions, images and stereotypes (concerning, for example, innate capacity, talent and worth) that are attached to males and females as- social-actors in Malawian society. This has resulted in turn in a structuring of mens' (and boys') and womens' (and girls') social roles relative to their access to resources and opportunities along gender dimensions (Grant Lewis et al. 1990: 31-33).

These dimensions reflect the assumptions, images, and stereotypes that are specific to the ethnic, rural-urban and class-based social groups and communities in Malawi (Davison and Kanyuka 1990; Hirschmann 1984; Kainja 1991a).

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b. "This is where the trouble starts...": Patterns of womens' access to opportunities in Malawi

These value systems and the resultant gender structuring are readily apparent in the domestic sphere where gender-related responsibilities are quite clear. But the system also affects the extra-household sphere of economic opportunity. In this case we repeatedly find that women are markedly under-represented in professional/technical, administrative/managerial, clerical and sales occupations relative to men, who accounted for 67% of workers in all the above mentioned categories in 1983 (Grant Lewis et al. 1990: 29).

Women accounted for 33% of the workers in these categories in 1983, but for less than 1% (they numbered 170 for all of Malawi) of the workers in administrative and managerial positions. Their share (34.7%) of total professional/ technical slots in 1983 reflects their relatively higher incidence as primary school teachers and as medical and dental workers (Ibid.; cf. Nambote 1990).

Among the very few women that succeed in professional careers, rare are they that achieve positions of power and responsibility, even in the teaching profession (De Beyer 1990; Grant Lewis et al. 1990; Hirschmann 1984 and 1985; World Bank 1990b). It was reported in 1990, for example, that only 1.7% of high ranking (T1) headmasters were women, while 3% of all headmasters and less than 5% of deputy headmasters were women (Grant Lewis et al 1990). Even on the farm, in their capacity as adults, as heads of households, and as farmers, women have been denied access to credit and effective extension services (Chipande 1985; Evans 1989).

This gender division of labor and access to resources and opportunities is the result of a shaping process which begins in the home, continues throughout the educational process, and is reinforced and sustained in all areas of social life in Malawi. The following statements by individuals that were included in a 1983 study of womens' patterns of participation in Malawi suggest the pervasiveness of socially-defined and sustained images and expectations concerning women in Malawian society:

> At home girls are told to tidy boys' rooms and do their washing; they become their servants and boys feel superior. So this is where the trouble starts, where the superiority and subordinateness begins. It becomes inherent and accounts for girls' behaviour at schools (Woman, quoted by Hirschmann 1984:7).

> Ask any woman about decisions: they will talk but in the end they will say: "you must ask the man." So this is a cultural thing (Senior male civil servant, Ibid.:6).

c. Education

Looking at schooling, we see that girls are systematically supported less than boys in their educational efforts. Studies in Malawi have repeatedly shown that parents provide more encouragement for boys and are more inclined to pay school fees for boys. Conversely, parents are also more inclined to demand greater domestic labor from girls at the expense of their studies.

Evidence is also accumulating that once in school, teachers (men and women alike) give more attention to boys, encourage them more, and discipline them less arbitrarily than girls. Conversely, girls are very often bereft of encouragement and are often actively discouraged by teachers and male students alike from developing competence and interest in arithmetic, science and other more technical area that are considered by boys, teachers and parents to be the male domain (Chawanje 1990; Chiwala 1990; Davison and Kanyuka 1990; Malewezi 1988; Nyirenda 1990).

Finally, the primary school curriculum, far from being gender-neutral, tends to ignore or downplay the contribution of women to everyday life and to development in Malawi, and often reinforces stereotypes concerning girls' and womens' roles and abilities (Davison and Kanyuka 1990; Habrowski 1990; Moyo 1990).

The effects of this value system on girls' and womens' access to information and education can be seen at all levels: basic literacy, primary, secondary, tertiary and teachers' training, vocational and technical training, and in agricultural extension. In primary, secondary and tertiary education, girls and women do not perform as well as boys. We can suppose that they become discouraged more often, and we observe that they drop out more often than boys. In the next section we will examine in greater detail, some of the impacts of this system of values on girls' access to and participation in primary education.

III. Access by women and girls to education in Malawi: Patterns of participation and constraint

A. Literacy

While womens' contribution to production and to social reproduction in Malawian society is indisputably important and is increasing in importance, their access to information and education is extremely limited. Illiteracy rates are high in Malawi, averaging 61% nationally, but they are even higher among women. An estimated 75% of females over 15 years of age in Malawi are illiterate, with rates varying widely among Malawi's 28 districts, and ranging from 53% to over 90% (Government of Malawi 1990c; UNICEF 1987).

Significantly, women account for almost 80% of the enrollment in adult literacy classes, a testimony to their interest and willingness to educate themselves even if they are discouraged or shut out of the formal education system, which we will examine next.

B. Primary education: getting in, staying in, and moving on

An estimated 44.6% of girls aged 6 to 13 were actually enrolled in primary schools during 1988-89, compared to a combined net enrollment rate of 53% for all primary school children. Once in the system, girls accounted for 47.6% of Standard 1 enrollment and for 43% of total primary enrollment. Once enrolled, however, about 40% of girls drop out by the end of Standard 1, compared with a drop out rate of 32% for boys (Government of Malawi 1989b).

Overall losses of primary school students are high: almost a third drop out between Standards 1 and 2; almost 50% drop out before finishing Standard 4. Girls sustain particularly heavy losses due to the impact of relatively higher drop out rates across all standards and thus lose access to primary education in Malawi to a greater degree. An estimated 31% of girls are lost by the end of Standard 8. While girls' repetition rates remain below rates for boys and below the national average of 21.3% in Standards 1-7, by Standard 8, 43% of girls are repeaters (Ibid.).

C. Secondary education: squeezing in

By Standard 8 in the primary system, large numbers of repeating boys and girls are struggling to pass the Primary School Leavers' Examination (PSLC) in hopes of squeezing through the infamous and extraordinarily narrow "bottleneck" between completion of primary school and admission to secondary school. Fewer girls (58%) than boys (70%) in Standard 8 pass the PSLC examination, and by Form 1 of secondary school, girls account for only 28% of enrollment compared with the 64% represented by boys.

The devastating effect of the bottleneck on girls' educational aspirations can be appreciated only when we realize that the relatively smaller percentage of slots that goes to girls is part of the fewer than 5% of the entire secondary school age population that gain access to secondary school each year.

D. Summary of major constraints and areas of GABLE intervention

The patterns and constraints described in sections B and C result from areas in the education system of Malawi that have been identified by GABLE as meriting support as part of a USAID- assisted effort to improve girls' attainments in basic education. GABLE has identified the following areas for intervention:

1. insufficient allocation by the Government of Malawi of budgetary resources to education, and insufficient allocation by the Ministry of Education and Culture of budgetary resources to primary education;

2. high repetition rates in primary standards, resulting in an excessively long time for students to complete the eight year cycle (currently the educational system supports 17 years of primary education for every Standard 8 graduate produced), and excessively high costs for producing a primary school completer;

3. insufficient numbers of primary school classrooms and teachers' houses;

4. underutilization of available primary classroom space;

5. excessively high costs for production and distribution of primary school learning materials;

6. insufficient numbers of primary teachers due to underutilization of existing Teacher Training College capacity;

7. negative perceptions and attitudes among students' parents and other community members concerning the value of educating girls;

8. high cost to parents of school fees, leading to unwillingness by parents to pay for girls' enrollment, and resulting in girls' non-enrollment and drop-out;

9. primary curriculum and teacher performance that is insufficiently gender sensitive with respect to the roles and contributions of girls and women in the wider society;

10. excessively low recruitment levels of eligible girls into Form 1 of secondary school.

Areas 1 and 2 are included in GABLE's Supporting Objective A: Improving the long term financial resource base and internal efficiency in the educational sector. Areas 3-6 are included in Supporting Objective B: Improving the quality of primary education. Areas 7-10 are included in Supporting Objective C: Improving girls' access to and quality of education. In section IV, the major components of the GABLE program will be assessed with respect to their social feasibility.

IV. Social Feasibility of GABLE's Interventions

A. Improving the long term financial resource base and internal efficiency of the education sector

The components of Supporting Objective A aim to increase education's relative share of the GOM budget; increase primary education's relative share of the education budget; and reduce repetition rates in primary schools, resulting in lower cycle costs for primary graduates.

GABLE aims to increase levels of allocation from 1991/92 levels of funding for education (13.49% of GOM budget) and for primary education (35% of education budget) to target levels of 18.5% by 1993/94, and 51% respectively, by program year 5. This is in keeping with an assessment that higher levels of financial commitment are needed to improve access to basic education and to improve girls' access in particular.

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Higher spending targets for education have been set before, but appear not to have been met by GOM. The issues that are raised by GABLE's objectives concern GOM access to resources and willingness to shift allocations among sectors. The need for increased GOM commitment to education and primary education is very clear, but the political willingness of GOM to move in this direction is less than clear. This clouds the prospects for changing resource allocations in favor of girls' education that are otherwise acceptable from a social feasibility point of view. The economic feasibility of these targets is detailed in the economic analysis for GABLE.

GABLE also aims to increase the efficiency of the education system by reducing repetition rates among primary school students. This component has two aspects. The first consists of providing support for MOEC's plans for reducing primary repetition rates by restructuring secondary school admissions in a manner that sharply reduces the incentives for multiple repetitions at the primary level.

The second aspect targets girls' more specifically by supporting MOEC with its plan to finance school fee waivers for girls that do not repeat. This component will provide an incentive to girls for not repeating. It should also provide incentives to girls' parents, who are usually responsible for paying school fees, to be more supportive of their daughters' education given the new linkage between reduced expenditures and higher attainment.

These components complement and assist current MOEC policies, are socially feasible, and should increase girls' access to primary education and help them move through the system more rapidly. Given the ambiguity that surrounds the decision to have students repeat, it is advisable that GABLE provide assistance for a study of the nature and locus (or loci) of decision-making on repetition so that the ceiling on repetition that will be introduced by the MOEC policy will not have an arbitrary impact. The impact of school fee waivers for non--repeating girls will increase their persistence but it is important to note that tuition is only one of several expenses that are commonly cited as obstacles to girls' entry and persistence in primary education.

Another, larger, expense is school uniforms. The MOEC has a policy of non-exclusion for students that do not wear uniforms, but it is applied by headmasters very ununiformly, so to speak.

Patterns of student exclusion linked to not wearing uniforms should also be clarified, MOEC policy on the issues should be clearly stated again and widely disseminated, and MOEC should be encouraged to ensure that the policy is implemented even- handedly.

B. Improving the quality of primary education

Supporting Objective B aims to increase the number of classrooms and teachers' houses; improve the utilization of available classrooms; increase the supply and lower the cost of learning materials; and improve the utilization of teacher training colleges.

There is a pressing need for more primary classrooms and for greater access to lower cost learning materials in Malawi's schools. It is entirely appropriate that GABLE address these needs.

Social feasibility issues arise, however, in the case of producing and delivering learning materials at a lower cost. This will be an important and needed contribution by GABLE, but there are private interests that link GOM and the parastatal book publishing and transportation agencies in Malawi, and they stand to lose profits and control over these key areas if procedures for introducing competitive bidding are pursued by GABLE.

While there seems to be general agreement among educators that quality learning materials should be more widely available on a more timely basis and at lower costs, there also seems to be a sense that existing arrangements for producing and distribution will not be altered easily. Thus some resistance, perhaps at very high levels, can be expected relative to GABLE's efforts to introduce competitive bidding and reduce the current monopolistic arrangements for publishing and distributing learning materials in Malawi.

The need for classrooms is daunting, and the impact of GABLE's sorely needed contribution may appear modest in the context of overall requirements. Existing classroom space can also be used more effectively by implementing double-shifting in some cases, another intervention which GABLE will support.

Finally, GABLE aims to increase the production of teachers by improving the utilization of existing teachers' training colleges. This is a sound intervention, and, like all the others in this supporting objective, will have a fairly broad beneficial impact on the primary system. Better management will lead to overrecruiting to compensate for non-matriculating teacher candidates, and to the admission of day students which will enable the colleges to train a number of teachers each year that is larger than that currently possible due to the ceiling that is imposed by their boarding capacity.

C. Interventions to improve girls' access to and quality of education

1. Social mobilization campaign

The campaign aims to change perceptions and attitudes in a direction that is more supportive of girls' education. The need for a concerted effort to increase the awareness in Malawian society about the importance of encouraging and supporting girl's education has been expressed repeatedly in recent years by groups and individuals in Malawi that are concerned with the contribution of women to national development. Examples include the National Seminar on Causes of Primary School Dropouts in 1988, the Conference on Access by Girls and Women to Education and Training, sponsored by the National Committee on Women in Development in 1990, and the Malawi Government's contribution to the 1990 World Conference on Education for All.

Participants in these fora, as well as the authors of a growing number of studies and analyses of education in Malawi (e.g., Davison and Kanyuka 1990; Kainja 1991, Grant Lewis et al 1990, Malewezi 1988) have repeatedly called for broad-based efforts to sensitize and educate the public about the value of primary education for girls, and to initiate efforts to modify long- standing and widespread patterns of gender-biased thinking about the nature and limits of education and opportunities for girls and women that have negative consequences for attainment by girls and women in Malawian society.

The Social Mobilization Campaign responds to this often expressed need by proposing a broad-based, multichannel, highly flexible and intensive approach. The campaign aims to clarify local perceptions and attitudes about girl's education, promote a dialogue with members of Malawi's communities on education issues, increase girls' awareness of and interest in educational opportunities, and change the attitudes and increase the willingness of community members to support and participate in girl's primary education. The campaign will contribute to the following changes: increased primary school enrollment by girls earlier in the primary school age range (6 to 13), increased parental support (both attitudinal and materially) for girl's education.

The campaign's target groups are parents, other primary caregivers, (and by implication, other community members), girls of primary school age, and individuals in positions of authority, having potential influence on policies relative to girls' and womens' access to education and other opportunities.

Because of their strategic importance as participants and as potential sources of support or resistance to girls' education, these targets groups are very appropriate. They are also comprehensive, and include most segments of Malawian society. In fact, the comprehensiveness of these target groups underlines the challenge faced by the campaign: effecting broad-based changes in social attitudes relative to areas of gender ideology and gender structuring that appear to have remained particularly resistant to change.

We can expect that features of this worldview, based in part on widely shared and deep-seated assumptions concerning the strong linkage between male domination and achievement, on the one hand, and the criteria that both men and women in Malawian society use on an everyday basis to define and assess socially acceptable (and "normal") notions of ability, status and roles, on the other, will resist excessive and rapid change.

Nonetheless, the diversity of approaches envisioned by the campaign to address some of the perceptions and attitudes that contribute to this worldview are attractive, based on local efforts to promote social change and development (of Theatre for Development), innovative, and are certainly worth trying.

The campaign's approach is feasible, particularly if all principal actors are involved from the very beginning (we refer in particular to the field staff of the Ministry of Community Services), and if the implementors remain concerned with adjusting their approaches in response to local response and opportunities.

We cannot predict the magnitude of change in the Knowledge, Attitude and Practice (KAP) values from the time of the pre- pilot survey until the time of the final evaluation, but we believe it is reasonable to expect statistically significant change. Changes in levels of knowledge about educational opportunities may be easier to realize than changes in attitudes, however, and two contributing factors merit attention.

First, given the links between attitudes concerning girls' education and those concerning womens' broader participation in Malawi's development, substantial and continuing change in the former, more specifically focused area may be depend on changes in the broader context relative to women's status and roles. There appears to be little movement in this latter area, although potentially strong voices for advocating change may be found in the NCWID and CCAM. This interlinkage between a part (perceptions and attitudes concerning girls' education) and the larger whole of values and attitudes concerning women in Malawi may have a dampening effect on the campaign's impact.

A second factor which contributes to current perceptions and attitudes is no doubt a shared awareness concerning the limited possibilities that exist (particularly for girls) in a largely poor and overwhelmingly agrarian society such as Malawi, for most individuals to use their education in ways that are seen as unambiguously linked to improved livelihoods. GABLE is not designed to affect the overall structure of economic opportunity in Malawi, but these structures may have a constraining influence on GABLE's impact.

Public awareness about the limited nature of existing opportunities both in the formal and informal sectors, given conditions where many families are short of the real income it takes to cover basic needs, may once again dampen the response--in acts if not in changed attitudes--that GABLE's campaign might otherwise have. Malawi's socio-economic development does not appear to have reached the point where there exists a sufficiently broad-based consensus about the inherent or even instrumental value of primary education.

Under these conditions, it is not surprising that strapped heads of households may be unwilling to invest scarce cash or forego valuable domestic labor provided by children in order to educate their daughters. This may be particularly so where there are choices to be made between supporting daughters and sons for promotion within a society in which the opportunities for professional development are so heavily weighted in favor of men.

2. Developing gender-appropriate curriculum and teacher performance

Beginning in 1989, the Malawi Institute of Education (MIE) initiated a program to revise the existing primary curriculum (the first time in some 20 years). The objective is to provide a better balance between emphasis on students' development of skills useful for gaining a livelihood (given the large number of children that do not continue on to secondary education), and emphasis on more academic requirements for the PSLC examination. Evidence from assessments of the old curriculum indicates that the content was biased significantly in favor of males, and underemphasized the roles of girls and women. This bias in favor of males was observed both in curriculum content and in teacher performance (Davison and Kanyuka 1990; Habrowski 1990; Moyo 1990). A review of the newly revised (May 1990) teachers' syllabi suggests that earlier gender biases persist in the new curriculum despite its greater emphasis on imparting "life skills." The newly emerging curriculum, therefore, should be assessed with reference to continuing gender biases.

There is a need to establish guidelines and mechanisms to incorporate gender-sensitivity into the MIE's efforts to improve upon the older curriculum. GABLE can usefully respond to this need by providing appropriately focused technical assistance (TA) and/or periodic training to MIE staff.

Malawian TA should be used when possible. If expatriate TA is needed, arrangements should be made for a thoroughly cooperative function with a Malawian counterpart, possibly within a unit having a well-defined focus. The periodic provision of short- term TA is preferable, but this arrangement may usefully follow an initial period of several (2-6) months of resident TA to organize and develop appropriate approaches for the task. Ideally, both members of the unit would have backgrounds in the sociology or anthropology of education and some experience with curriculum development needs.

This assistance could take the form of a unit that is concerned with ensuring that insofar as possible, aspects of the primary and secondary curricula are linked to and drawn from the realities of socio-cultural and economic life in Malawi, with particular but not exclusive concern for having the curriculum more accurately portray both males and females in terms of their roles in society.

A second aspect of improving the curriculum in terms of gender sensitivity is teacher performance. It is not enough for GABLE to support the development of a more gender-appropriate curriculum for primary and secondary education. Teachers, headmasters, deputy headmasters, teacher trainers and individuals that are responsible for in-service training must also <u>perform</u> in class according to guidelines that reflect greater attention to gender sensitivity issues. Thus GABLE should also assist MIE and other relevant agencies of MOEC to ensure that all teachers, trainers and inspectors receive thorough training in using the more gender appropriate curriculum and in elements of gender-appropriate classroom performance.

Current levels of training that are provided by the Malawi Institute of Education (MIE) to teachers that are implementing the revised (1990) Standard 1 curriculum in pilot schools throughout Malawi appear to be insufficient. An estimated 3-4 days were spent at MIE to introduce teachers and headmasters from the pilot schools to the new materials in all subject areas and to the curriculum's new orientations, and provide some practically-oriented experience. Essentially, however, teachers have been obliged to rely very heavily on their teachers' guides, and have benefitted from occasional backstopping from MIE, and from their headmasters.

The point here is to emphasize that an effort to introduce a new, more student-centered and life-skills oriented curriculum, as is currently the case in Malawi, especially the gender-sensitive curriculum proposed by GABLE, will require greater investments in teacher training and in refresher courses and follow-up. Three or four days seem highly inadequate for introducing such demanding changes in content and teacher orientation, and we predict that similar time demands will be faced when the gender-sensitive curriculum is introduced with GABLE support.

The importance of effective teacher training and follow-up cannot be over-emphasized; having new materials and orientation available in the form of documentation is no guarantee that students will benefit from the innovations. Evidence from Malawi (and other countries) suggests that despite the availability of new teaching methods, teachers are often reluctant to change their ways (Chakravarti 1989). Implementing the gender-appropriate curriculum which GABLE supports will also require GABLE assistance for training, seminars and workshops for all education staff that are called upon to implement and evaluate implementation of the new curriculum.

In addition to providing initial and follow-up training and visits to schools and TTCs, MOEC should be encouraged to introduce (if these are not in place) some form of incentives for more effective teacher performance with reference to gender-sensitivity and other aspects of the revised curriculum.

a. Summary assessment of GABLE's social campaign and gender appropriate curriculum components

The campaign can be expected to have a significant impact on levels of knowledge about educational opportunities. We can also expect that use of the Theatre for Development and other approaches by the campaign for promoting the value of educating girls will lead to some improvements in girls' and parents' attitudes about education.

The campaign's impact on attitudes may be constrained by: (a) the effect of a broader set of values and attitudes concerning women in Malawian society, and considered in section II.C; and (b) a widely shared perception concerning the broadly and severely limited opportunities that the Malawian economy offers for reaping the benefits from investments in primary education, especially in girls' primary education (see section IV.C.1).

In sum, the constraints of community-based knowledge and attitudes about education and about girls' education in particular may be reduced by the campaign's impact. Without broader changes in the socio-cultural and economic milieu in which community knowledge and attitudes are situated, however, GABLE can realistically hope to reduce or limit, but not to eliminate these constraints.

3. Financing school fee waivers for non-repeating girls and increasing the proportion of girls in secondary education

Two additional interventions that are planned by GABLE will support the campaign's aim of increasing enrollment by girls in primary school. These components consist of financing school fees to cover expenses for non-repeating girls in standards 2-8, and increasing intake in Form 1 of girls that complete primary school.

Both of these components will have an impact on a subset of opportunity structures that are currently perceived as important obstacles to girls' educational access: the high cost of tuition fees relative to very low levels of disposable household income in Malawi, and the widely shared perception that very few primary school completers are admitted to secondary schools. Neither component will eliminate these constraints on girls' access to education, but they will reduce their excluding impact.

During the recent past, GOM practiced highly effective agricultural marketing policies through the Agricultural Development and Marketing Corporation (ADMARC) that amounted to an indirect and very heavy taxing of the smallholder farmers that comprise the largest part of Malawi's population, in order to transfer resources to the country's more lucrative estate sector.
Given this past record of broadbased resource transfers from Malawi's impoverished smallholders to the more privileged commercial estates, the fact of continuing widespread poverty in Malawi despite improved farm gate prices in recent years, and in light of the continuing high costs of schooling children relative to disposable household incomes and other pressing needs, it would be extremely appropriate to remove all fees from participation in public primary education.

GABLE's financing of school fee waivers for girls is not only feasible but extremely appropriate. GABLE's aim of increasing intake of girls in secondary education is also a feasible strategy, and should be coupled with GOM initiatives to increase overall opportunities in secondary education.

ANNEX K

MONITORING AND EVALUATION

SEPTEMBER 30, 1991

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MONITORING AND EVALUATION PLAN

I. Introduction

GABLE aims to enhance girl's attainment in primary education in Malawi by providing resources to the Government of Malawi (GOM). This is in support of the following objectives:

1. increase the financial resource base and improve the internal efficiency of the education sector;
2. improve the quality of primary education; and
3. improve girls' access to and quality of education.

The monitoring and evaluation plan that follows proposes approaches toward monitoring and assessing GABLE's impact relative to the program areas or components for each of the three supporting objectives.

II. An approach to monitoring and evaluating GABLE's impact

A. Availability of pertinent information at MOEC

MOEC appears to have an effective system for monitoring a range of features within Malawi's education system. MOEC's yearly Education Statistics Report provides readily accessible and useful information that will be necessary for monitoring features of access by females and males to and attainment in primary education, and for assessing the impact of the GABLE program upon those features.

For the most part, this information is available in disaggregated form by standard, sex, region, and often, district; it thus responds to GABLE's requirements for monitoring and evaluation. In cases where published MOEC data are not specifically responsive to evaluation needs, data can be recomputed to order.

This is currently being done through contractual arrangements with the Demographic Unit, Chancellor College, which is assisting MOEC's Monitoring and Evaluation Committee through the UNESCO Planning Project (MOEC, Planning Division) in its efforts to develop a series of key educational indicators.

While MOEC statistics appear to be comprehensive, occasionally the picture they provide of specific situations seems to be lacking in some dimensions. In fairness to MOEC measurement efforts, however, much the same can be said of educational (and social) measures and statistics worldwide: they do not provide a picture of important qualitative features, processes and conditions. While important, the qualitative dimension to educational monitoring and evaluation is very frequently under- emphasized or ignored by evaluation schemes.

A potential example of the quantity-quality gap in MOEC's perspective on primary education in Malawi concerns student access to textbooks for the three required subjects of English, Arithmetic and Chichewa. MOEC's annual report indicates that students have good access to all three books, although remarks by staff at MOEC headquarters and at DEO and school levels indicate that school-level access varies considerably, and can be very limited, both in terms of quantity and quality.

It is not feasible to verify MOEC's statistics on the more than 3 million primary textbooks that are theoretically in use by more than a million primary school students each year. On the other hand, spot checks might be advisable in order to assess real distribution (as opposed to overall ratios) and the quality of the materials that are available.

B. Monitoring and evaluation of GABLE's impact

The mechanics of collecting, analyzing and interpreting pertinent data will depend on the nature of the responsibilities and roles that are identified relative to the GABLE program for a series of actors, some of which are in place, and others of which remain to be identified; these include the USAID/Malawi Human Resources Development Officer (HRDO), a personal services contractor to help the HRDO manage GABLE, a Secretariat and potential Steering Committee for GABLE, and periodic external technical assistance made possible by USAID contract arrangements.

One very important task of a GABLE manager should consist of establishing and maintaining contact, and formulating mutually agreeable approaches and procedures, with appropriate divisions and departments of MOEC and with other relevant agencies involved in education and training (e.g., MOCS).

This is essential to ensure a reliable periodic flow of information relative to each of the impact indicators identified below so that baseline conditions can be ascertained and verified, progress toward periodic and overall targets assessed, disparities signalled (e.g., to the Steering Committee or another body concerned with primary education policy issues concerning girls), and appropriate corrective and/or analytical measures taken.

Collaboration between GABLE management, the secretariat and oversight structures (e.g., the Steering Committee) should be frequent and involvement by all Malawian counterparts and staff should be consistently active in view of GABLE's aim of enhancing the long-term institutional capacity of MOEC to focus on improving access and attainment by girls in primary education.

If a contract arrangement is possible for providing GABLE with external (as a complement to local) sources of technical assistance, annual, and perhaps, initially, semi-annual missions would enable GABLE to momentarily focus more intensely on in-depth analysis of issues, progress and obstacles that are revealed by routine follow-up and monitoring activities by resident national and expatriate staff and other concerned individuals.

With adequate data collection, and monitoring and follow-up by resident actors, the duration of external TA missions for purposes of evaluation back-up could be brief--from two to three weeks. These TA missions could also focus on providing hands-on training and upgrading relative to specific needs by personnel connected with GABLE and in MOEC that are involved in monitoring and evaluation functions, and with linking M&E to problem-solving and system improvements.

An indicative schedule for back-stopping by external TA as a complement and partner to local staff and TA capacity follows:

Six months into GABLE implementation:

Confirm that effective arrangements are being made to generate or obtain and use available quantitative and qualitative data at all pertinent levels in the system that are necessary for tracking GABLE impact.

End of Y1 and semi-annually (or as otherwise required):

* Collaborative review of ongoing monitoring and evaluation relative to identified indicators;

* identification of alternative tracking approaches or data and indicators relative to novel developments, problems, etc.;

* identification of pertinent qualitative indicators to better capture social dynamics within classrooms and upgrading and in-service training, relative to implementation of more gender-appropriate curriculum and teacher performance;

* identification of needs for spot-checks, problem- focussed studies and data analysis by locally available expertise (Center for Educational Research, Center for Social Research, Demographic Unit, etc.);

* identification and/or provision of training and upgrading, etc.

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III. GABLE's supporting objectives and impact indicators

A. Supporting Objective A: Increasing the financial resource base and improving efficiency of the education system

This supporting objective consists of three program areas:

A.1.a: increasing the share that education is allocated within the GOM budget;

A.1.b: increasing the share that primary education is allocated within the education budget;

A.2: increasing educational efficiency by reducing the costs of the eight year primary education cycle in Malawi.

1. Program Area A.1.a: Increase education's share of the GOM budget.

Agreement by GOM and USAID on the GABLE program (henceforth the GABLE agreement) will result in a greater share of total GOM budget resources being allocated to education. Current, i.e. 1991/92 levels of support for education amount to 13.5% of the budget. The increased level of GOM commitment to education that is targeted by the GABLE agreement will be 16.5% by Year 3 of the program, and 18.5% by Year 5.

2. Program Area A.1.b: Increase primary education's share of the Education budget.

The GABLE program agreement will also result in a greater share of the education budget being allocated for primary education. Currently (1991-92), primary education accounts for 39.55% of the education sector's recurrent expenditures. The level of GOM commitment for primary education that is targeted by GABLE will increase primary education's share (both recurrent and development) from 35.12% in 1991/92, to 43% by program Year 3, and to 51% by Year 5.

3. Program Areas A.2: Increased efficiency of the educational system.

GABLE will increase system efficiency by providing financial resources to support MOEC's efforts to reduce repetition by primary school students. This initiative by MOEC will reduce the average length of time required for students to complete the 8 year primary education cycle, and will result in reduced overall costs for completion of the cycle.

Currently, one primary school student in five (21.3%) is a repeater, although repetition rates vary from standard to standard, as figures for 1988-89 illustrate:

Standard	Percent of students repeating
1	20.8
2	19.5
3	17.7
4	14.2
5	18.5
6	15.6
7	16.3
8	46

The very high repetition rates in standard 8 result from the large number of students, many of which are multiple repeaters, and 67.2% of which are boys, that attempt to obtain sufficiently high scores on the Primary School Leaving Certificate (PSLC) examination to increase their chances of admission to Form 1 of secondary school.

Initiatives by MOEC to reduce primary school repetition rates which will be supported by resources from GABLE consist of restructuring admissions to secondary school and financing school fee grants for non-repeating female students.

a. **Restructuring secondary admissions.**

The GABLE agreement calls for implementation, beginning with program Year 2, of MOEC's recently formulated policy on secondary school admissions which aims to sharply curb the incentives for students to repeat Standard 8 many times as is currently the case. MOEC policy calls for 75% of Form 1 entrants to be non-repeaters of Standard 8. Twenty percent of Form 1 entrants will be admitted from a pool of one-time repeaters, and only five percent will be admitted from among multiple repeaters.

b. **School fee waivers for non-repeating girls.**

GABLE's support for MOEC efforts to reduce repetition rates, shorten the length of time that students take to complete primary school, and lower costs of the primary cycle also will give particular attention to girls. GABLE will provide financial support for MOEC plans to provide school fee waivers for non-repeating girls in Standards 2-8. As a complement to MOEC plans to restructure the basis for entrance to Form 1 of secondary education, the introduction of school fee waivers to non-repeating girls will provide an incentive to girls (and to their parents to the extent that they are responsible for paying fees) to continue on through the primary standards without repeating.

GABLE aims to reduce the 1988/89 primary repetition rate in each standard by 25% by the end of the program.

Similar targets are set for reducing repetition rates among girls in standards 2-8. Repetition rates will also be reduced to 10% from the current level of 21.7% for girls by program year 3.

4. Monitoring GABLE impact in Program Areas A.1 and A.2:

Yearly reports will be prepared by the MOEC/USAID/GABLE secretariat/manager on progress toward the program target and will provide the basis for establishing the next year's target.

The impact of GABLE on patterns of financial resource allocation to education and to primary education respectively will be monitored on the basis of annual reporting on financial planning by GOM and MOEC which will be available to the GABLE Secretariat/manager to verify that progress occurs on annual and overall program targets.

Information for use by the GABLE secretariat/manager and/or short-term technical assistance for purposes of monitoring yearly and overall progress with reducing overall primary repetition rates and repetition rates among girls in standards 2-8 is routinely made available in December of each year by the Planning Division of MOEC in its Educational Statistics Report.

The annual report, which is dated December of the year, is based on information provided on a comprehensive questionnaire by headmasters the previous February or March. Tabulation and verification of data at MOEC headquarters requires several months. Access to the data prior to verification and publication may prove difficult, and an agreement will be necessary to ensure early access if needed for purposes of GABLE monitoring.

Likewise, agreements will be necessary in order to ensure access to other potentially useful data that is tabulated at the District Education Office (DEO) and the Primary Section of MOEC, but which is not currently transmitted to MOEC's Planning Division. This additional data is based on periodic enrollment returns. Headmasters prepare monthly enrollment returns with a breakdown by standard and sex. These returns are sent to the DEO, where they are used to prepare two returns during each of the three terms in the school year; one return early in the term and another return later in the term. The six returns are sent to the Primary Section of MOEC, but the resulting information is not transmitted to the Planning Division.

Otherwise, pertinent information can be obtained by contacting the Planning Division at MOEC. Estimates of current primary cycle costs can be calculated on the basis of data from the same source.

5. Summary of targets for Supporting Objective A:

Increase education's share of GOM budget from (13.5%) in 1991/92 to 16.5% in 1993/94, and to 18.5% in 1995/96;

Increase primary education's share of MOEC budget from 35% in 1991/92 to 51% in 1995/96;

Reduce repetition rates in each primary standard by 25% by the end of the program.

B. Supporting Objective B: Improving the quality of primary education

This supporting objective consists of five program areas:

B.1: increasing the number of classrooms and teachers houses;

B.2: improving the utilization of available classrooms;

B.3.a: increasing the supply of learning materials;
B.3.b: reducing the delivered cost of learning materials;

B.4: improving the utilization of Teacher's Training Colleges.

1. Program Area B.1: Increase in the number of classrooms and teachers houses

The GABLE agreement requires that the GOM submit, prior to Tranche 1, a construction plan for increasing the number of primary classrooms and teachers houses for all donors and GOM, with a urban/rural and regional breakdown, and targets.

The stock of primary classrooms in 1988/89 consist of 14,501 classrooms of which 1224 were temporary. Teachers houses numbered 10,424 (of which 2,170 were temporary). The stock of primary classrooms under the GABLE program will be increased by 300, and the number of teachers houses, to 75 by the end of the program.

a. Monitoring impact in program area

Yearly reports will be prepared [as above] on the basis of information provided by PIU and the Planning Division, on progress toward the program target and will provide the basis for establishing the next year's target.

2. **Program Area B.2: Improve the utilization of available classrooms.**

The GABLE agreement requires that the GOM submit a plan, prior to Tranche 2, for introducing double-shifting in urban primary schools as a means of improving the utilization of classroom space. MOEC will implement double-shifting on a pilot basis prior to Tranche 2, and adopt and implement a generalized plan for double shifting by Tranche 3.

Preliminary research indicates that 45% of classes are held outside in Lilongwe urban schools at present. Double shifting could have a significant impact on reducing this percentage.

a. **Monitoring impact in program area**

Yearly reports will be prepared [as above] on progress toward the program target and will provide the basis for establishing the next year's target.

3. **Program Area B.3.a: Increase the supply of and reduce the delivered costs of learning materials in primary schools:**

The GABLE agreement requires GOM to formulate and adopt a plan to introduce competitive private-sector procurement for the supply and distribution of primary school learning material prior to Tranche 2. This will result in greater access by students to texts in classrooms and increase the overall ratio of exercise books to students from the current level of 2 to 4 by Year 3.

Prior to the release of Tranche 3, the GOM is required to initiate competitive priave sector procurement for the supply and distribution of primary school learning material.

Delivered costs of [specified learning materials] will be reduced by 15% by the end of the program.

a. **Monitoring impact in program area**

Yearly reports will be prepared [as above] on progress toward the program target and will provide the basis for establishing the next year's target.

4. **Program Area B.4: Improving utilization of Teachers' Training Colleges**

The GABLE agreement requires GOM to improve and increase the utilization of TTC; by Tranche 2 and 3. This will entail over-recruiting candidates for TTC training to compensate for losses caused by non-matriculating applicants, and admitting day students in addition to the current enrollment of boarded students

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Current student/teacher ratios in TTCs are 16:1. This ratio will be increased to 24:1 by program Year 3. Utilization of TTCs will be increased to 95% of its capacity for boarding students, and through admission of day students.

a. **Monitoring impact in program area**

Yearly reports will be prepared [as above] on progress toward the program target and will provide the basis for establishing the next year's target.

5. **Summary of targets for Supporting Objective B:**

The number of primary school classrooms will be increased by 300 by the end of the program;

The use of double-shifting in classrooms will increase. Targets will be established during the double shifting study to be conducted in year one of the program.

The availability of [exercise books] as a ratio of books to students will increase from the current value of 2 to 4 by the end of the program;

The unit cost (reflecting production and distribution) of required [exercise books] will be decreased by 15% by the end of the program.

C. **Supporting Objective C: Improving girls' access to quality education**

This supporting objective consists of four program areas:

C.1. A social campaign to improve perceptions concerning the value of girls' education;

C.2. School fee waivers for non-repeating girls in standards 2-8;

C.3. Establishing a gender-appropriate curriculum;

C.4. Increasing the proportion of girls admitted to secondary school.

1. **Program Area C.1. Social campaign to improve perceptions concerning the value of girls' education and increase timely enrollment and persistence**

The GOM will agree to the concept and preliminary design of a social mobilization campaign. The campaign is designed as a broad-based, multichannel, highly flexible and intensive approach toward improving local knowledge, perceptions and attitudes about girls' education and increasing the willingness of parents and other community members to support primary education for girls.

a. Monitoring GABLE impact in Program Area C.1

A baseline measure of knowledge, attitudes and practice (KAP) will be carried out by a sample-based national survey prior to commencement of the campaign, and will focus on the following areas where GABLE will have an impact:

Knowledge:
1. levels of knowledge about school fee grants for non-repeating girls;
2. levels of knowledge concerning access to schools and teachers.

Attitudes:
1. attitudes toward girls' education;
2. attitudes concerning the relevance of primary school curriculum for girls.

Practice:
1. ratio of girls to boys per standard;
2. girls' net enrollment ratios per standard.

Following a pilot phase in Year 2, the campaign will be implemented nationwide beginning late in Year 3, and will continue through Year 5. At the end of Year 5, another KAP survey will be administered to assess the impact of the social mobilization campaign.

While no baseline information is available on these KAP areas, information from case studies exists. These suggest that the education of girls is valued relatively less than that of boys, that attitudes and perceptions are often negative concerning girls'education, and that levels of parental support for girls' education are low.

The campaign should result in a significant shift in knowledge, attitudes and practice in a direction that is more supportive of girls' education.

Some baseline information is available on the practice dimension to be explored by the KAP survey. Girls account for 44.6% of enrollment in all primary standards, with variations per standard as indicated below[1]:

Standard	Girls as percentage
1	47.6
2	46.0
3	46.2
4	44.8
5	44.2
6	42.6
7	41.3
8	32.8

1] Education Statistics 1989.

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The figure for girls as a percentage of total enrollment in primary school is 44.6%. Although it can be anticipated that values for levels of girls' enrollment and net enrollment will increase, no targets have been set for the impact of the campaign. Currently, females comprise an estimated 52% of the national population.

Yearly reports will be prepared by MOEC/USAID/GABLE secretariat/manager/ on major events in the campaign's program area.

2. Program Area C.2: School fee waivers for non-repeating girls in standards 2-8

The GABLE agreement requires that the GOM implement a nationwide system of school fee waivers for non-repeating girls in standard 2-8.

Currently, an average of 21.3% of girls in all standards are repeaters, although repetition rates vary by standard:

Standard	Percentage of girls repeating
1	20.5
2	20.6
3	18.5
4	15.1
5	15.2
6	17.1
7	20.1
8	43.4

By the end of the program, overall repetition rates for girls will decrease from the current base of 21.3% to 10%.

a. Monitoring GABLE impact in Program Area C.2

Yearly reports will be prepared by MOEC/USAID/GABLE secretariat/manager/ on progress toward meeting targets.

3. Program Area C.3: Establishing a gender-appropriate curriculum

GABLE calls for GOM to establish guidelines and a mechanism for implementing a gender appropriate curriculum, and teacher, teacher trainer, and inspector performance in standards 2- 8.

Currently the primary curriculum (part of which has been recently revised with a view toward incorporating more attention to life-skills) is described at best as lacking gender sensitivity relative to the roles and contribution of girls and women in Malawian society.

Targets have been identified for introducing gender sensitivity into the primary curriculum and into Teachers Training Colleges and in-service training as follows:

By year 2:
* gender appropriate elements will be incorporated in the revised Standard 3 curriculum at a point between regional testing and printing stages in the curriculum production schedule of the Malawi Institute of Education (MIE).

By year 3
* elements will be incorporated in revision of Standards 4-6 at the writing stage of MIE production schedule;
* elements incorporated in curricula of TTCs and in-service training guidelines.

By year 5:
* gender appropriate curriculum implemented in Standards 3-5;
* gender appropriate curriculum printed for Standards 6;
* Gender appropriate curriculum tested in Standards 7-8.

a. **Monitoring GABLE impact in Program Areas C.3**

Evaluation of curriculum content and teacher/trainer performance relative to guidelines will be implemented by MIE which will benefit from GABLE support in the form of financial resources and technical assistance to enhance MIE capacity to focus on gender issues in development, implementation and evaluation of curricula and teacher performance.

4. **Program Area C.4: Increasing the participation of girls in secondary education**

By the end of the GABLE program, GOM will increase the proportion of girls in secondary school to not less than 33%

a. **Monitoring GABLE impact in Program Area C.4**

Yearly reports will be prepared by MOEC/USAID/GABLE secretariat/manager/ on progress toward meeting targets.

ANNEX L

SOCIAL MOBILIZATION CAMPAIGN

SEPTEMBER 30, 1991

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Executive Summary for Social Mobilization Campaign

The social mobilization campaign of GABLE is designed to convince Malawians to put their girls in primary school earlier and keep them there longer. The campaign will identify how people feel about this issue and then proceed with what can be done to change their attitudes and behavior. In Malawi, girls often do not go to school until they are nine or ten and they leave before puberty.

The primary target for this campaign will be parents and caregivers in the rural areas with children of primary school age. Girls' enrollment and persistence is a problem throughout the nation, but it is even more severe in the countryside, where 85% of the population live. The target group is primarily illiterate and radio reach is limited to an estimated 35% of the country. Even at that low rate of saturation, a majority of the radio listening is in the cities. At the moment there is no national television. People live in small villages and most of the communication they receive is from the top down. A secondary target audience for the campaign will include the girls themselves. A third target group will be those in authority who can influence and effect change in the country.

There has been extensive study on why girls do not go to school early or stay in school long enough to become literate or numerate. Reasons include prohibitive school fees, girls' need to work at home, lack of uniforms, pregnancy or early marriage, initiation ceremonies that require their full commitment, and the sense that school is too crowded and difficult and that primary education is not valuable for girls. What we do not know, however, is what would convince people to change their minds.

The social awareness campaign will do substantive research to find out what messages would make parents and girls see this situation differently and modify their behavior. The research to define these messages will be basically carried out by the Theatre for Development (Tfd) troupe at Chancellor College who will go into the rural areas, talk to villagers about their feelings on the subject of girls education, improvise plays around their responses, and perform the plays in the villages with the local people participating and giving feedback. Grass roots workers from the Ministry of Community Services(MOCS) will also be involved with the Tfd in the design of the messages whichy will be pretested nationally and used in the media campaign with posters, radio, video, other dramas and written material.

The campaign will be multifaceted. A large element will be personal communication at the village level using workers from MOCS,the MInistry of Agriculture, and CCAM (a women's NGO strongly connected to the political structure of the country). Workshops will be held to familiarize people to these issues and to tell them what is being done to improve the situation in the primary schools. The workshops will also be designed to help people explore their attitudes about girls' education.

The project will also use radio through public service announcements, jingles, and by introducing applicable themes in the popular dramas that are broadcast weekly in Chichewa, the local language. Other elements include the production of a video drama to use at workshops and to be distributed by the Ministry of Agriculture on their mobile video vans in the rural areas, and various posters and leaflets designed for illiterate audiences. Additional plans include use of local bands and music groups, various contests and competitions, the issuing of a stamp on the subject, and the design of a logo. The project will also identify good female role models and send them in to the schools to talk to the students.

It is important in campaigns of this type to keep committed organizations and individuals involved. For GABLE, this will be dealt with through a national task force. The group will meet quarterly and will use its position to keep the values of GABLE in the national picture, by participating in design elements of the campaign and major publicity launchings that will be held throughout the life of the project. Involved groups would include MOEC, MOCS, CCAM, NGOs and religious groups, and national and local leaders.

The timing of the campaign is critical because it needs to wait until sufficient classrooms and facilities are in place nationally, in part, provided by GABLE. The present classroom/student ratio is 1:88 and the teacher/student ratio is 1:67. A campaign that would encourage girls to go to school prematurely and further increase these ratios could lead to tremendous frustration and disappointment.

The five year campaign will begin with one year of preparation and research, including staff hiring and training. It will be followed by a one year pilot in Machinga where we will test the communication strategy in a smaller and more controlled situation before we take it nationwide. The pilot will be monitored and evaluated continuously and changed when necessary to reflect that input. The national campaign will last one to two years depending on a mid-term evaluation of its success. The project will begin with a baseline KAP (Knowledge, Attitude and Practise) survey to measure people's feelings about the subject. At the end of the campaign a similar evaluation will be conducted to measure differences.

Administration for the social mobilization campaign will be housed at Chancellor College's Department of Fine and Performing Arts. The Department has a commitment to development communications and sees the project as a first step in a larger program on social mobilization campaigns. The department also houses the theatre for development which will have a critical role in creating appropriate messages. The campaign will keep close ties to MOCS, CCAM and other organizations providing grass roots organizing support.

Structurally the campaign will have a national coordinator and two co- coordinators to implement the design and run the program. One of the co- coordinators may be involved with MOCS in Lilongwe. Administrative personnel should have strong backgrounds in at least some of the following areas: communications, materials development, research and training.

June 7, 1991

SOCIAL MOBILIZATION ANNEX
Doe Mayer

Primary classrooms in Malawi are generally separated by sex--girls on one side and boys on the other. There is a story of one such schoolroom in rural Malawi, hot and jammed with over one hundred students sitting on the floor.The male teacher is giving a science lesson and he directs his instructions and his questions to the boys in the class. A bright little girl on the other side of the classroom has an answer to one of the teachers questions but she cannot get him to even see her side of the room, much less acknowledge her existence. The textbook she shares with three other girls shows drawings of boys doing the science experiments while girls stand behind them passively and watch. She has seldom seen a female teacher or woman in authority. Is it any wonder that she gets the idea that science, or indeed school in general, is not for her?

I BACKGROUND

The PAIP on Malawi Girl's Attainment in Basic Literacy and Education (GABLE) calls for the design and implimentation of a social mobilization campaign "to promote girls education as an effective means to improved family well being." The idea is to convince Malawians that primary education for girls would be useful both to them directly and to society in general. Research provides few examples for substantial campaigns of this type. Most major social mobilization campaigns in developing countries are organized around health issues such as child spacing, AIDS information, child immunization, oral rehydration therapy, (ORT), and concerns of hygiene. In Malawi, however, half of the girls never attend school at all. A campaign to convince females to go to school earlier and stay in school longer seems appropriate as a way of changing basic attitudes about this difficult and critical issue. This campaign is thus planned as a project within the GABLE program scheduled to occur over a four to five year period.

II RATIONALE FOR DESIGN

A. Assessment of the Target Group

The primary target group for this campaign will be parents and primary care givers in the rural areas with children of primary school age. In Malawi 85% of the population live in the rural areas. Girls' enrollment and persistance is a problem throughout the nation, but it is even more severe in the countryside. The target group is primarily illiterate and radio reach is limited to an estimated 35% of the population, and even at that low

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saturation, most of the operating radios are in the cities. Rural people live in small villages and most communication is from the top down. A secondary target audience for the campaign will include the girls themselves. A third target audience will include those in authority who can influence and effect change in the country.

B. What we know about girls persistance from the research

There are many reasons why girls don't go to school early or stay in school long enough to complete their primary education or at least to become literate or numerate. Research has identified a number of them which will be more clearly identified in the social feasibity analysis. A summary list might include:

1. School fees are prohibitive
2. Other work at home (girls are required to do more in the home than boys)
3. Lack of school uniforms because of problems paying for them.
4. Requirements of cost and time for girls to undergo initiation ceremonies at puberty which occur during the school year
5. School curriculum isn't meaningful to them
6. School is considered socially inappropriate (girls might develop bad habits).
7. They lack motivation to continue
8. Parents aren't supportive
9. They drop out to work for money in the private sector
10. They marry before they can complete primary school
11. They get pregnant and are required to drop out of school or they are expelled.
12. The distance to the school is too great and they feel it is dangerous to walk alone.
13. They don't see female role models to encourage them to perceive options in their lives.
14. They see little chance for entrance into secondary school.
15. School is too crowded and nobody pays attention to them.

GABLE is addressing a number of these concerns (school fees, crowded classrooms, the relevance of the curriculum, entrance into secondary school). The issues to be dealt with in the mobilization campaign are those of attitude. Parents and girls need to understand the reasons why a primary education can be useful to them. The PAIP says that the campaign will "promote education, particularly girls education, as a means to improving the household economy and health." There are also other reasons why the education might be a benefit. They include:

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1. Literacy
2. Numeracy
3 Entrance to secondary school
4. Better ability to succeed in their own terms
5. An ability to influence and encourage their own children's education
6. Making money
7. Developing new or innovative careers
8. More control over their own lives
9 Leadership skills
10 Confidence in themselves
11 Better nutrition

There are other indirect incentives for the nation that might be cited also. They are less apt to persuade the target audience however. These include:

1. Less children and a lower fertility rate
2. More ability to take important positions in government and guide Malawi's future
3. Increased food crop production and productivity
4. A decrease in infant and child morbidity and mortality
5. Control of the spread of AIDs
6. Greater off farm employment

C. Strategy

1. Targetting of messages

Although we know through research why girls <u>don't</u> go to school early enough and we have many ideas on why they <u>should</u>, we don't know what messages will convince parents and girls to change their attitudes and behavior so that girls receive more education. Substantive research will have to be done with the targetted audiences to see what messages will appeal or feel important to them. A number of messages will need to be defined early in the campaign to be used in one to one communication, on posters and in radio programs and spots as well as for the video. Other messages will have to be used throughout the course of the campaign to keep it alive and vital. The information we get from this research may surprise us. It is quite possible that the target group will articulate this problem in a different way and be receptive to messages we haven't researched or thought about yet. It is critical that messages come from the target group and that all uses of them be pretested before major resources are committed.

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2. Campaign approach

The campaign will be multifaceted with less reliance on mass media than most mobilizations of this type. That is because of the great lack of media saturation in the country. As stated above, radio only gets to 35% of the population and that is primarily urban. There is no national television in Malawi, although plans are underway to develop a pilot scheme in Blantyre in the next two years. Printed material will be developed to get to literate decision makers, but it will not be very helpful in reaching most of the target audience. Communication for the latter group will be largely in Chichewa, the national language. The main approaches of this campaign will be person to person and group outreach at the grassroots level through extension and rural workers in various ministries, and bottom up communication facilitated through the Theatre for Development at Chancellor College (hereafter known as Tfd.)

3. Timeframe

The social mobilization project is designed to run between four and five years. It will have a fairly lengthly organization and preliminary research stage and will be composed of a one year pilot project to test the communication strategy and a one to two year national campaign to implement it. The timing of the national campaign is critical. It really needs to wait until sufficient classrooms and additional facilities are in place nationally, in part provided by the other components of GABLE. It would be a serious mistake to launch the social mobilization campaign prematurely if the educational facilities can't cope with the campaign's success. As it is, the average national classroom/student ratio is 1:88 and the teacher/student ratio is 1:67. A campaign that would encourage girls to go to school and further increase these ratios could lead to tremendous frustration and disappointment.

4. Commitment of leadership

Campaigns like this can never work without the full support and involvement of those in power. Fortunately, Malawi is filled with influential people and organizations-- political, governmental and NGOs, with a history of concern and personal investment in this area. A major element of strategy in this campaign will be to keep those leaders and institutions involved throughout the life of the mobilization. We intend to do this in a number of ways. The most critical will be the organization of a GABLE task force (also called steering committee) representing many of these involved groups and individuals. The task force will meet quarterly and will help identify organizing strategies to get messages out. They will be involved in various media launchings and will help disseminate messages and awareness within their own organizations.

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5. Various launchings

To keep the campaign vital and newsworthy, various launchings and bursts of publicity will be designed throughout the life of the project. This is a critical element in keeping the subject alive and pertinent. It should also help to keep all of the target groups involved. Various components that might be launched include the pilot project, the national campaign, the publication and dissemination of a graphic logo that will identify all campaign literature and visual media, the release of a dramatic video production, and the introduction of a series of radio spots on MBC (Malawi Broadcasting Corporation). The introduction of new messages on posters or graphics may also be publicized. These need to be continued throughout the life of the campaign.

D.The choice of theatre for development (TFD) to do targetting of messages

As has already been stated, targetting of messages that are culturally appropriate and acceptable will be a major activity for the campaign. An innovative element in the design of this particular mobilization is the use of the Theatre for Development (TFD) part of the Department of Fine and Performing Arts at Chancellor College in Zomba to do the message targetting. The group, under the guidance of head of department, Dr. Christopher Kamlongera , has been working in this field since 1981. This is how they operate. The troupe, made up of students majoring in drama at the University, go out into rural areas where they work with villagers to articulate a problem from the villagers point of view. They have done this with numerous health related issues over the past ten years. In this case the problem would be girls' enrollment and persistance in school or what the people view as the value of education. Then the students go back to the University and improvise a play around the themes that the villagers have discussed. They return to the village and try out the drama for the citizens, encouraging them to give feedback and even get involved in the performance, which they do with great humor and vitality.

Approximately 200-300 people attend these participatory performances. Ultimately, out of this research in the first year, we intend to develop approximately 5 messages that would be appropriate nationally.These multiple messages would then be used in other theatre performances as well as in grass roots training and on various media elements of the campaign. As the campaign continues, new messages will be developed. The plan is to use this technique instead of the more conventional focus group research.Focus groups are said to be difficult in Malawi because people often feel hesitant to speak freely or honestly. This is a particular problem when chiefs in the villages organize the

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groups. Sometimes there are unspoken allegiances or agendas within the focus groups that make it hard to get honest or individual answers. There may be social pressure within a group where everyone knows each other to conform to a certain line or way of thinking. The drama performances seem to free people up to express themselves spontaneously. They can speak through the characters and don't have to take total responsibility themselves the way they do in focus group discussions. Humor is often used as a way to get at hidden agendas or commonly held beliefs that cannot be spoken or addressed directly. The TFD offers an exciting, original, and culturally appropriate way to design creative and engaging messages for the target population.

E. Choice of Institutionalising and the Organisational Structure at Chancellor College

The social mobilization campaign for GABLE will be located in Zomba to work with the Department of Fine & Performing Arts at Chancellor College. The reasoning behind this decision is based on the following:

1. The Department of Fine & Performing Arts (DFPA) is committed to starting a development communication program at the University and this would be an excellent first step to demonstrate the need for such skills and capability within the country. This objective will encourage the Department to go out of its way to support GABLE and the campaign. In addition there is a wellspring of support and expertise within the department to use for the campaign.

2. Chancellor College is geographically well placed for this campaign. The theatre group, of course, is housed there. The pilot project will be located in Machinga, close to Zomba(see Rationale for Timeline IV B Pilot for the reasoning behind this choice). As a result, a good deal of the logistical operation, particularly for the first two and a half years of the project, is best placed at the University. Also, a Zomba location would provide easy access to graphic facilities,most of which are in Blantyre.

3. The University provides support but little adminstrative interference or bureacracy. Certain procedures, taking about six months, will have to be carried out by the Department to get the campaign onboard, but once that is accomplished, work should be able to proceed with efficiency. There is physical room in the Department for the campaign to be housed.

4. GABLE will provide a minivan for the Tfd staff to use. The University, will maintain it and pay petrol costs. The University also will regulate it and control misuse.

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5. Major administrative work will be done by a team hired especially for the project. This will include a chief coordinator who will hire and train two Malawian co-coordinators over the course of the first few years. Possibly one of the Malawians will be in Lilongwe and connected to MOCS. There needs to be a substantial effort to keep lines between TFD and MOCS open. After the first two years, the coordinator will provide technical assistance when needed but will not continue permanently through the life of the campaign. Mechanisms should be set up between the three administrators to divide work in the following areas, training, materials development, communications design and implementation,research, administration, TFD,and grass roots communication. An office will be set up especially for this project at the college.

F. Other Issues To Do With the Question Of Institutionalisation

Other possibilities for housing the project include the Ministry of Community Services (MOCS) and Chitukuko Cha Amayi M'Malawi (CCAM). Both organizations offer excellent structures for delivery of messages, but do not offer the advantages of Chancellor College for housing the campaign.

1. MOCS

The Ministry has indicated an interest and enthusiasm for assisting the campaign by using it grass roots workers to define and get out the message

a. Outreach potential

It has tremendous potential for outreach through its 379 community development assistants and it's 180 homecraft workers. These workers will be involved with the TFD in the actual definition of the messages in the pilot district. They will join them in the villages when people are asked to define problems around girls' schooling from their own point of view. They will also develop other strategies for getting out the message. These grassroots workers are in every district of the country and the Ministry has plans to train approximately 50 more in the next few years.

b. Staffing strengths

While the community development assistants are paid employees of the Ministry directly, the homecraft workers are employed by the Ministry of Local Government and paid for by various private organizations and NGOs. MOCS also uses literacy workers to teach functional literacy classes throughout the country.These people could also be familiarized with our messages through workshops. The subjects of the books used by this group could include issues of girls education and problems with enrollment and persistence. These would then become areas of discussion within the groups

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c. Production capabilities

The Ministry has limited production capabilites for getting out social mobilization messages. Issues of media such as graphics, video or radio recording facilities, or printing are usually contracted for outside the Ministry with other public or private production organizations (see Sect. V. Breakdown by Design Elements for details)

d. Financial implications

MOCS does not require help in paying staff but needs assistance with paying per diem and transport for workshop participants and design personnel. They have also requested some equipment including vcrs, monitors and video cameras for training. (see VI budget for details)

Linkages between this Ministry and other groups providing grass roots support for the campaign seem well worked out. MOCS has worked closely with Ministry of Health on the AIDS and child spacing campaigns, and has also been connected with the Min. of Agriculture through its workers and mobil cinema vans.

f. Political/social implications

Provision should be made to measure the implications of working through MOCS when evalution of the pilot and national campaigns are carried out. Issues of who are the messangers and how are they viewed by the pilot group always need to be examined carefully in any campaign of this type.

g. Capacity

MOCS has many diverse programs within it. Of great importance to us is the National Commission for Women In Development, as well as the sections that deal with Women's Programs, Leadership Training and Early Childhood Education.

There is a consistent feeling, that the Ministry, though committed to the area and highly innovative and energetic in its approach, is overloaded with activities from an administrative and implementation point of view. This amy affect some of their overall impact. The idea to locate the campaign at Chancellor College is partially based on this feedback. A major effort must be made, however, to keep the Ministry highly involved in the campaign by its participation on the task force, its feedback in the targetting of messages, and its use of grass roots workers as a major element in the delivery system. The Ministry, for its part, has expressed great enthusiasm and interest in this campaign.

2 CCAM

CCAM does not have the capacity or mandate to house the social mobilization campaign but it can provide important input and support at both the task force and grass roots levels.

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a. Outreach

CCAM works through the political system at the district level on development projects of interest to women. At that level, the chairperson for the Women's Branch (known as the League of Malawi Women) of the Malawi Congress Party and the chairperson of CCAM are the same. CCAM is organized through standing and special committees on a variety of subjects. They have a special committee on child spacing for that mobilization campaign and they have expressed an interest in developing a similar structure for a campaign on girls' enrollment and persistance in primary school.

b. Staffing

Grass roots workers are all voluntary and work through political meetings, farmers club meetings and village workshops to get development messages across. Training would need to be provided for motivators at the district and national level.

c. Production Capabilities

CCAM has no production capabilities within the organization.

d. Financial implications for USAID

Funds need to be provided for training costs such as transport and per diem.

e.Linkages

CCAM routinely works with various ministries and provides excellent linkages to political mechanisms at the national, district and local levels.

f.Political and Social Implications

As with MOCS, provision should be made to evaluate the messengers in the pilot and national evaluation designs.

g. Capacity

CCAM has indicated great interest in this campaign. It fits in with their priorities which have been articulated in various resolutions to do with this subject at their annual seminars. They would like to be involved at both the grass roots and task force levels. They have also expressed a specific interest in helping to identify good female role models such as retired teachers, nurses, agricultural workers and women entrepeneurs to speak at primary schools throughout the country. school teachers may also be very helpful in this campaign.

G. Monitoring, feedback and evaluation

A major component of the social mobilization campaign will be the mechanisms set up to evaluate the program. There are a number of institutions within the country that are capable of doing this type

of research. The most notable is the Centre for Social Research in Zomba. The Centre has a history and commitment to do this kind of work, but it is in tremendous demand as it is really the only organization of its kind actively operating in the country at the moment. A possible way to deal with the overload is to team up the Centre with other researchers functioning through other institutions nationally. There are capable individuals at Chancellor College, Bunda College of Agriculture , the Polytechic in Blantyre, and various ministries including MOCS and Agriculture. The ultimate goal of the program of course is to increase girls timely enrollment and persistance in school. The campaign,however, needs to change attitudes in order to do this. It is difficult to measure the effect of a campaign like this because many factors that have nothing to do with the campaign, like word of mouth or the building of a new school in the area might be involved in changing attitudes and behavior. Through its multichannel efforts, however, there are certain indicators that might measure whether people get new information that helps them rethink their situation and send girls to school.

The specific impact indicators would concern the following areas and the campaign can be expected to contribute to statistically significant changes in each:

a. Knowledge-
   1 Levels of knowledge about school fee grants for non-repeating girls .
   2. Levels of knowledge about more access to school (more teachers & classrooms) will increase.

b. Attitude
   1. Attitudes about girls education will change positively
   2. Attitudes about the relevance of the primary school curriculum for girls will change positively.

c. Practise
   1. Girl/boy ratios for each standard will increase.

The mechanisms for studying the above indicators, as well as for giving us clearer ideas about grass roots attitudes on these subjects and helping us design and revise the campaign are designed in the following way:

1.Baseline Knowledge, Attitude and Practice Survey (KAP). This study will be conducted nationally before the campaign begins. It should cover 200-300 people and be reflective of national values around the issues of timely primary school enrollment and persistance for girls. It should give us specific information about why girls don't go to school or stay in school. The goals of the research and the sampling design must be carefully thought

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through. The instrument will be pretested before the design is implemented.

2.Evaluation and Monitoring Study throughout the pilot. For the year of the pilot there should be a continuing evaluation and study plan. This might include some specialized kinds of focus group surveys or in depth interviews about the messages or the effectiveness of the campaign.TFD might also be involved in assessing impact. The result of this monitoring process should be a periodic kind of evaluation which effects the pilot design throughout. When the pilot is completed a final survey should be carried out to measure its effectiveness and inform/influence the design of the national campaign.

3. Mid-campaign National Evaluation. This survey should be designed to help make mid-term corrections for the national campaign. It should be measuring whether levels of knowledge about changes in the system (more schools and teachers) are getting to the target audience. It should also measure whether attitudes about the curriculum or the needs of the value of the education have increased. It needs to measure the effectiveness of the campaign and the desirability of continuing it for a second year.

4. Final Project National Evaluation. This survey should be designed like the baseline KAP,and should help measure the changes in the national target audience in terms of knowledge, attitude and practice.The impact indicators articulated at the beginning of this section should be used in the measurement of these changes.

5. One additional mechanism for evaluation and recording of the process should be a video shot throughout the campaign . This could be done either with VHS equipment within the DFPA using their staff or with the video unit at Chancellor College. The tape would document the campaign and particularly how the THD works. It then could be used as a research tool both by the College and internationally. It would be an inexpensive but useful tool in designing other campaigns of this type.

V Rationale of Design by Elements

A. Task force

A key element in the design and structure for the campaign will come out of the GABLE task force. This body will be composed of representatives of critical organizations and individuals who have been committed to the issue of girls' education.The group might include representatives of the following:MOEC, MOCS, Min. of Agric., Min. of Info. President's Office, NGOs, other government

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agencies such as National Commision on Women in Development, religious leaders, donors, Chiefs and other important community leaders. They would meet quarterly to give input on issues critical to GABLE's success. As far as the mobilization campaign is concerned, the task force might also be involved in launchings and publicity. They could help in giving input on the design of workshops at the grass roots level. Task force members might be involved in organizing more elite workshops and meetings for influential people within their own groups. They would also spearhead the campaign by keeping the issue in the forefront of newpapers and periodicals and in making clear the national committment to bring attention to this problem.

B.Grass roots organisers (people to people communication)
Due to the lack of a many mass media options in Malawi, the best way to get the message across will be one to one communication at the grass roots level.The campaign will use local organizers from a number of different sources to help get the message out. Among them will be the following:

1. MOCS- The MInistry has a total of about 560 local workers known as both Community Development Assistants and Homecraft workers. These workers are probably the most important for the project in that the Ministry's interest and committment to this is substantial and critical for its success. These workers would be involved throughout the design and implementation of the pilot and national campaigns, both by working with Tfd.and through the Ministry's own structures for getting messages out. These include village meetings, various women's clubs and activities, and one to one communication. Messages used by these workers must be developed with their input so that they are socially appropriate and so that the workers feel personally connected to this issue. MOCS uses paid and volunteer workers in their literacy campaign and these people also could be made more aware of the issues involved.Ideas about girls persistance must be introduced into the functional literacy material so that it could be discussed in those clubs and meetings also. Ministry personnel will be given brochures and posters to distribute in villages.

2. Ministry of Agriculture and Ministry of Health- Both these ministries have substantial numbers of workers on the ground who, with training and awareness, could help communicate our messages through their existing structures.

3. CCAM- This NGO with strong government ties has expressed its interest in being involved in this campaign through its numerous standing committees and special committees for issues like this one. It's work in village areas include members speaking at political meetings, farmers' clubs and village workshops. CCAM can also identify a cadre of retired teachers who are natural carriers for this message and are respected members of their communities.

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C. Design of Workshops for and with Grassroots Workers

Workshop design will need input from the ministries and groups involved but from the campaign's point of view, they might be organized in the folowing way:

1. Extended workshops to train and conscientize trainers and motivators. These workshops could be held at the district or even the national level and would involve input from different experts including Women in Development specialists, educators, researchers,and communications and media people. Trainers would have to investigate their own prejudices regarding this subject and would be asked to design exercises to get people to confront honestly their feelings on this issue. Workshops would probably run about 5 days.

2. Local workshops in villages that would be designed to encourage family dialogue around this subject. Issues of concern to GABLE might be publicized , including tuition wavers for non-repeating girls and the program's attempt to build more classrooms and change the student/teacher ratio. Another concern should be finding ways to help women talk more freely about this subject to their husbands. Perhaps they feel that they should not push too hard about this because their husbands make the final decisions. Other workshops might be for men and women together (for instance, those sponsored by the Min. of Agriculture) to help foster a dialogue on people's concerns about this subject. Other local workshops might be designed exclusively for girls to give them a safe place to explore their own concerns and conflicts. For instance, how do they feel about dropping out of school to attend initiation rites? Do they feel the curriculum applies equally to them? What are their options if they finish primary school? These local village workshops should probably only take one day.

D. Theatre for Development

The way that the TFD works and the reasoning behind using them to help target messages was explained in II D. (p.4 of the annex). The theatre will play a critical role in communicating through their plays at a grass roots level. The troupe will be involved in both the pilot project and the national campaign. Besides the targetting of messages for the other media (radio,posters and the video drama), they will continue to talk to villagers, improvise material from their input and use them in the performances. The very act of performing this way conscientizes people about the problem. As Dr. Kamlongera, head of the theatre says,this "is a way to get people to identify and discuss their development needs with the view of reaching some solutions and taking appropriate action" (Theatre for Development in Africa, Dr.Kamlongera,p. 229). The students from Chancellor College who comprise the troupe will work weekends on this campaign for most of the school year. With a small amount of additional funding they can put additional

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fulltime energy into this over their holiday break from June to September. The theatre is also committed to training other groups to use their techniques.

E. Other more conventional kinds of theatre

The choice of TFD does not preclude the use of other more conventional kinds of theatre and music groups that flourish in rural areas all over Malawi. These groups should be encouraged to develop their own materials around this subject. Troupes might use folklore or music as ways to get these ideas across in the villages. Recent research indicates that there are about 70 such groups in the country, including 5 in the pilot district of Machinga.

F. Radio

Malawi Broadcasting Corporation provides radio programming and transmission for the country. Radio's saturation may not be complete, but it remains an important way to get messages out in both the urban and rural areas. MBC has facillities to produce programming in Blantyre but there are other production options within the country, especially in Lilongwe and Zomba. The corporation produces two very popular dramas weekly in Chichewa with constant characters and original shows could be written around the campaign themes and incorporated into the schedule. Various public service announcements (PSAs) utilizing important people, dramatic situations and jingles should be produced for the campaign. As with all material, they will need substantial pre-testing to discern any weaknesses or problems in the content. MBC will broadcast PSAs at no charge on their own schedule. It would also be wise to pay the Corporation to guarantee broadcast during prime listening times which include early morning (6-7 a.m.), mid day (11-12a.m. and 3-4p.m.) and late afternoon (5-6p.m.). Spots should probably be 60 seconds and a number of different ones should be produced to allow for some variety in the daily menu. Radio should be used throughout the pilot project and the national campaign. It is important in reaching influentials as well as local people. Radio programs could also be recorded on cassette for use at other times on tape recorders throughout the country.

G. Video Programming

1. Production

A half hour video drama in Chichewa should be produced in the second to third year of the campaign. The tape can be made through the facilities of the Audio-Visual Unit at Chancellor College in Zomba. That is the highest quality facility at the moment in the country. It uses U-Matic Low Band PAL which will provide a decent picture for distribution on mobile video vans throughout the rural areas. Perhaps by the time the video is produced, there will be Betacam equipment in the country which would be the best alternative for this kind of production. The tape could be made using the Unit's crew. Thought should be given to providing technical assistance at the conceptual, production and editorial

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stages, however, since video skills within the country at the moment are not very high. The video should be pretested and revised if necessary depending on audience response. A separate launch should be designed to introduce the video nationally.

2. Distribution

The tape would have two distribution channels and possibly a third if MBC's pilot station in Blantyre is broadcasting at the time. Primary distribution would be through mobil video vans that take their own generators and do shows in the rural area. The MInistry of Agriculture, through its Extension Aids Branch, plans to switch over some of its film vans to large screen video projection systems in the next couple years. It has already bought two of the systems. Agriculture does the bulk of rural showing for the country. They get audiences of up to 5,000 people per showing and vans stay in the field for two weeks at a time and provide nightly performances nationwide. Programs are approximately 2 and 1/2 hours long and contain a number of separate productions ranging from agricultural techniques to dramas and entertainment programming. They also contain commercials for various products. Other vans roam the countryside including those of the Ministry of Information and David Whitehead, a fabric manufacturer that promotes its product and shows other kinds of programming. Lever Brothers also intends to purchase a number of video vans in the next two years. The second distribution mechanism would be playing the program at various workshops on the subject of girls enrollment and persistance. There are VCRs in the country and they are often used for this purpose. The tape could certainly be viewed at national and district level workshops, and also possibly at the more grass roots level in urban areas and some villages.

H. Publications

1. Newspapers and Periodicals

Recent research reveals that there are 25 newpapers and periodicals in the country. The largest is Boma Lanthu in Chichewa with a circulation of 80,000. Others of interest range from religious magazines to farm monthlies to Police Magazine which is the largest periodical in Chichewa and English and reaches a population of 48,000. Of the English language newspapers, The Daily Times on weekdays has a circulation of 12,000, and the Malawi News on weekends reaches 35,000. Articles can be both written for the papers/ magazines or suggested to staff writers. It seems that this is a common and useful way to get messages across to literate audiences and influentials throughout the country.

2.Brochures and leaflets

These should be produced to be used at workshops and for distribution in government clinics and offices,as well as shops and businesses. Although graphic elements should be carefully incorporated in the design, these materials are also primarily for

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use by literate audiences. There are numerous printing facilities and graphic artists in the country, ranging from very simple to advertising quality. These will accomodate all the printing and graphic design needs mentioned throughout the annex.

3. Posters

Posters should be produced with illiterate people in mind. After careful pretesting, they can be distributed and displayed in public places as well as in some homes and schools. Posters should be of adequate quality to ensure a fairly extended life. Full color treatments should be considered, as well as one and two color designs. At minimum 5 different designs should be printed throughout the life of the campaign and possibly even more should be considered.

I. Logo Design

A graphic logo should be designed and used on most written material and artwork to do with the project. It cannot be used on everything because it should be launched during the national campaign. Again, pretesting is critical to insure target audience acceptance and comprehension.

J. Good Female Role Models in Primary Schools

A major problem for primary school girls is limited role models. The campaign will seek to deal with this by inviting successful women to speak to primary school classes. This will be organized for the pilot project in Machinga by CCAM, which has a particular interest in this field. Other organizations and Ministries will be asked to participate also. Women from all walks of life should be involved. There will hopefully be successful farmers and small scale entrepeneurs, as well as nurses and civil servants. Care should be taken that many of the role models have not had a formal secondary school education to support the idea that a primary school education can also improve girls future.

K. Other Ways to Get Out the Message:

There are numerous other methods that should be employed in this campaign to get out the message:

1. Tee shirts and fabrics- these could be printed with the national logo and colorful designs. They could be sold in shops and given away for special events. They could also be distributed to workshop participants and used as prizes for contests.

2. Stamps- There is a long lead time necessary for the printing of stamps but this campaign will have up to a five year life. A major launching could be made around the issueing of a stamp encouraging girls in school.

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3.Various bands- Malawi has a number of very successful bands including a Health Education Marching Band (boys and girls) that tours the country and an all girls Young Pioneer Band that would provide excellent role modeling. When they perform in rural areas, these bands get huge turnouts.

4.Other music sources including rock groups and choral workshops. These groups could be encouraged to write music on this subject. Popular music videos have been produced in other developing countries to get social awareness ideas across. There is a major choral workshop at Chancellor College held anually which gets significant national attention. Perhaps an all girls choir could be used to get across this message at that event and in churches. Jingles might also be recorded by these groups for use on MBC.

5.Match boxes, badges, pennants and stickers might all be employed using the logo with different pretested messages.

6. Signs are producad in Malawi for use on local busses. These could be adapted from the poster designs and used to cover the outsides of busses throughout the country.

7.Football matches- these have been used in other developing countries to sponsor public service messages like ours.

8.Contests could be organized to promote girls in school. Perhaps essays could be written by primary school students about the benefits of their education. The winners could be published in the national newspaper. There could also be jingle contests with the best being broadcast on the radio. Drama competitions might be an excellent way to get people involved and talking about the issues.

9. Medals and certificates could be given out to girl students who had done especially well in primary school. Perhaps the winners could could be sent around the country to speak in classes and act as role models for other girls in school.

10.Comics have been an especially successful way to get ideas across to illiterate or semiliterate people. These could be distributed in literacy classes or other grass roots meetings.They could also be given out at the end of workshops.

11. Puppets have been employed in Malawi with particular success in the south, through the Ministry of Agriculture on the mobil cinema vans. Since the distribution system is in place, shows might be produced showing how successful farmers, both men and women, are literate and numerate. Shows could employ humor to get the message across and might be especially appealing to children.

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III TIMELINE FOR CAMPAIGN (3 1/2 to 4 1/2 years)

YEAR ONE- STRUCTURAL ORGANIZATION, RESEARCH, CAMPAIGN PLANNING (could take 1 1\2 Years)

1) Hire coordinator and place her in Lilongwe/Zomba

2) Advertise and hire two Malawian co-coordinators

3) Complete administrative processes to house campaign in the Department of Fine & Performing Arts at Chancellor College in Zomba.

4) Research and identify technical resources and assistance to carry out campaign.

5) Organize, design and implement baseline national Knowledge, Attitude, Practise survey (KAP)

6) Theatre for Development (TFD)
   a) Researches, targets and articulates 10-15 culturally appropriate messages in Machinga.

   b) Takes those messages and pretests them in other target areas of country nationally.

   c) Identifies approx. 5 messages which would be culturally acceptable nationwide. (other messages might be considered for local audiences in particular areas)

7) Targetted messages are used for designs in posters, radio programming and spots, and video scripting. (These activites are continually carried out through the third and fourth year of the campaign).

8) GABLE task force identified to oversee and give input to whole program including social mobilization campaign. Task force uses personnel from MOEC, MOCS, CCAM, Min. of Agriculture Extension Aids, Donors, NGOs, Religious leaders, Chiefs, and other gatekeepers and important people.

9) Grassroots organizers representing MOCS, CCAM and Min. of Agriculture from Machinga area begin to be trained and made specifically aware of the messages and issues targetted by tfd. Workshops are given including tfd personnel.

10) Pilot project designed using all available inputs.

11) Office of Chancellor College put in place with personnel,equipment, and transport.

YEAR 2 PILOT PROJECT CARRIED OUT IN MACHINGA

1) Tfd uses targetted messages and other inputs to continue their work in the villages of Machinga.

2) Posters designed and pretested for grass roots distribution in important places in villages.

3) Ongoing training of grass roots workers representing MOCS et al.

4) Grassroots workers get message out through one-to -one communication, literacy classes and other local meetings.

5) Ongoing task force input on pilot campaign and national campaign design.

6) Radio programs (dramas,spots, discussions, jingles) produced, pretested and broadcast nationwide.(continues though years 3 & 4)

7) Ongoing publication of related stories in magazines, newspapers and other periodicals

8) Evaluation and monitoring throughout course of pilot to reflect new information (includes mid pilot evaluation).

9) Video script is written.

10) CCAM and women identified by other groups make periodic visits and lectures in primary classrooms in Machinga.

YEAR 3 (First six months)PILOT EVALUATED, NATIONAL CAMPAIGN DESIGNED

1) Pilot evaluated. Lessons learned will be applied to national campaign.

2) Logo designed and pretested

3) Task force input continues.

4) Grassroots workers trained within their districts throughout the nation.

5) Continued production of posters, radio programming, and periodical dissemination.

6) Video is produced, pretested and revised.

7) National campaign is designed.

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YEAR 3 (second six months and YEAR 4,first six months)NATIONAL CAMPAIGN BEGUN

1) One year national campaign is implemented.

2) Logo launched and distributed.

3) Task force continues (is involved in logo launch and other publicity).

4) Grassroots workers trained in their districts to do national outreach.

5) Posters, radio programs and periodical information disseminated.

6) Video (1/2 hour drama) is released with a launching. Then it is distributed to mobile video vans in rural areas.Tape is also used at workshops and with task force and other meetings.

7) Tfd workers disseminate and produce plays nationally.(Other theatre groups also take this on at this point).

8) Women role models lecture in primary schools.

9) After first six months, national mid-term evaluation is carried out and evaluated. Decision is made whether to continue campaign for an additional year and what messages to change in the process. (Campaign also might be more consciously targetted at this point to urban audiences)

10) If decision is made after the mid term evaluation that the national campaign should be finished in one year, final evaluation should be completed at the end of the year campaign.

YEAR 4(second half) & YEAR 5 (first half)CAMPAIGN FINISHES/EVALUATION BEGINS

1) Possible continuation of national campaign for a second year with new messages, launches, and spurts of publicity.

2) If campaign is two years, final national evaluation at end.

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V RATIONALE FOR TIMELINE

Major issues of thinking here are mentioned in C. Strategy 3 Timeframe.(p. 3). They include the necessity for a lengthly organization, training and preliminary research stage to prepare for the pilot project and elements of the national campaign including the task force implementation. The other issue mentioned there has to do with the timing of the national campaign, which must be launched when better facilities and programs are in place to respond to increased demand. Without care in the timing,the campaign could backfire, causing frustration and disappointment to the very people we are trying to help.

A. The Planning Stage

A major thrust in the design is the planning, training and organizational stage. It will take a year to hire appropriate staff, both internally and externally. It will also take time to complete the administrative procedures necessary to house the project at Chancellor College.Tfd will use the time to research and articulate appropriate messages in Machinga and then take them to other parts of the country to pretest them for acceptability outside the target area. The messages then need to be incorporated into national elements of the campaign including radio public service announcements, (PSAs), spots, and dramas (all in the national language, Chichewa) Planning stage time will also be needed to train staff and design workshops for grass roots workers in the pilot area. During that year, the national GABLE task force of committed people and organizations will be formed and will start to operate and give input to the whole program. The planning stage may take up to a year and a half.

B. Pilot

The pilot will provide an opportunity to test the communication strategy in a smaller and more controlled situation before we take it nationally. This is a common technique in social mobilization campaigns to avoid making costly mistakes to say nothing of the risk of culturally offending members of the target population.The part of the country picked for the pilot is Machinga district, an area with dismal statistics in our area of interest. It has one of the lowest percentages of girls enrolled in primary school in the country. 77% of females in the district have never attended school and 87% of girls age 5-9 have never attended! The district is geographically near the University at Zomba and so will be close to our adminstrative office and convenient for the Tfd program which will be going there every weekend for the first year and a half. The area has mixed religions with a substantial number of Moslems in the population, as well as refugee communities from Mozambique. The district has had a fairly normal 86 persons per square kilometer, but the

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increase in population from 1987-88 was 50% as compared to the national average of 44% (this might have been because of the refugee influx)and it also has 87 males per 100 females when the national average is closer to 95 per 100 females. The pilot project will be monitored and evaluated continuously over the course of it's life and changed when necessary to reflect new input.

C. Other activities carried out during the pilot year

While the pilot is being carried out, other national activities will be going on. Posters used in Machinga will be designed to be appropriate in other parts of the country also. The task force will continue meeting and strategizing about messages for the national campaign. Stories will appear in newspapers and magazines, primarily in English, to keep educated and influential Malawians aware of the campaign. A producer will be chosen for the video drama and the script will be written.

D. The six month evaluation/preparation for the National Campaign

After two and a half years there will be a six month period of evaluation of the pilot and continuous design for the national campaign. This will be a necessary period to stop and regroup so that preparation can be thought through before the full campaign begins. The logo design should be pretested and completed so that a launch can be considered during the national mobilization. A major launch with appropriate government officials should also be organized for the opening of the campaign. The video should be produced ,field tested, and revised during this time. Major training for grass roots workers in all relevant ministries should begin in this period.

E. The National Campaign

The campaign should be implemented with a burst of timely publicity coming from all elements including the task force, radio, newspapers and print media, brochures and posters. During the first year there should also be launchings for the video production and the logo. Grass roots workers all over the country will be involved in one to one and small group communication and mobilization. Women role models will lecture in primary schools. Tfd will be working nationally and will be training other local theatre groups to carry on in their tradition. Other more conventional plays and puppet shows might be produced also. After the first six months of the national campaign a mid-term evaluation will be carried out to determine how the campaign is working and whether it should be extended to a second year. When the campaign is totally complete, whether after one or two years,

a final KAP evaluation will be carried out to determine the effect of the campaign on attitudes and behavior.

F Conclusion

The whole timeline completes at three and a half to four and a half years, depending on the length of the national campaign and the preparation period. If the program is successful, we should see substantial increase in girls' enrollment and persistance in primary school as well as a national change in attitude about the value of girls' education.

SOCIAL MOBILIZATION CAMPAIGN

(1) External TA

	FY 92	FY 93	FY 94	FY 95	FY 96	TOTAL
Coordinator	140,000	140,000	140,000	140,000	0	560,000
RT Airfare (3 trips)	0	6,000	6,000	6,000	0	18,000
Total	*140,000*	*146,000*	*146,000*	*146,000*	*0*	*578,000*

(2) Support Personnel

	FY 92	FY 93	FY 94	FY 95	FY 96	TOTAL
ADMINISTRATION						
Administration Overhead	4,308	3,379	3,379	3,379	776	15,219
TA	5,750	5,750	5,750	5,750	2,000	25,000
Asst. Coordinator (2)	8,750	8,750	8,750	8,750	8,750	43,750
Secretary	1,750	1,750	1,750	1,750	1,750	8,750
Driver	700	700	700	700	700	3,500
Clerk	700	700	700	700	700	3,500
SUBSISTENCE						
Asst. Coordinator (2)	12,000	12,000	12,000	12,000	12,000	60,000
Driver	3,000	3,000	3,000	3,000	3,000	15,000
PILOT						
Drama Troupe						
Students	3,360	3,360	0	0	0	6,720
Driver	3,990	3,990	0	0	0	7,980
Lecturer	2,100	2,100	0	0	0	4,200
NATIONAL CAMPAIGN	1,680	1,680	0	0	0	3,360
Drama Troupe						
Students	0	0	3,360	3,360	0	6,720
Driver	0	0	3,990	3,990	0	7,980
Lecturer	0	0	2,100	2,100	0	4,200
TA	0	0	1,680	1,680	0	3,360
Total	0	0	50,000	0	0	50,000
	48,086	*47,159*	*97,159*	*47,159*	*29,676*	*269,239*

(3) Commodities

	FY 92	FY 93	FY 94	FY 95	FY 96	TOTAL
ADMINISTRATION						
Telephone & Fax	2,000	2,000	2,000	2,000	2,000	10,000
SUBSISTENCE						
Computer	6,000	0	0	0	0	6,000
Fax	2,000	0	0	0	0	2,000
VCR & Monitor (TRI system)	2,000	0	0	0	0	2,000
VHS TV camera	3,000	0	0	0	0	3,000
Mini Van	25,000	0	0	0	0	25,000
Project Vehicle	20,000	0	0	0	0	20,000
NATIONAL CAMPAIGN						
Radio Cassettes & Dis	0	0	500	500	0	1,000
Video Production – Umatic	0	50,000	0	0	0	50,000
Tape Copies	0	0	600	0	0	600
Video Distribution	0	0	2,000	2,000	0	4,000
Motorcycles (MOCS workers)						
50 – 2 per district	140,000	0	0	0	0	140,000
VCRs & Monitors 3 Trisystem	6,000	0	0	0	0	6,000
Cameras – 3 VHS for training	9,000	0	0	0	0	9,000
LOGO Design	0	20,000	0	0	0	20,000
Total	*215,000*	*72,000*	*5,100*	*4,500*	*2,000*	*298,600*

(4) Meetings, Workshops, and Training

	FY 92	FY 93	FY 94	FY 95	FY 96	TOTAL
PILOT						
Advocacy Workshops						
Launches & Ceremonies	30,000	30,000	0	0	0	60,000
Hi-Level Publications	20,000	0	0	0	0	20,000
District-Level Activities						
Workshops other than MOCS	10,000	0	0	0	0	10,000
Printing (Booklets & Posters)	80,000	0	0	0	0	80,000
PILOT PUBLICITY						
Radio	25,000	0	0	0	0	25,000
Bus Distribution	13,300	0	0	0	0	13,300
Press	5,000	5,000	0	0	0	10,000
Meetings, Workshops, Training (MOCS)	126,000	0	0	0	0	126,000
Grassroots Workshops	30,000	0	0	0	0	30,000
Special Activities (Puppets, Contests, etc)	30,000	0	0	0	0	30,000
NATIONAL CAMPAIGN						
Advocacy Workshops						
Launches & Ceremonies	0	0	40,000	40,000	0	80,000
Hi-Level Publications	0	0	20,000	0	0	20,000
District-Level Activities (Briefings/Workshops)	0	0	25,000	25,000	0	50,000
Printing (Booklets & Posters)	0	0	80,000	0	0	80,000
NATIONAL PUBLICITY						
Radio	0	0	25,000	25,000	0	50,000
Bus Distribution	0	0	13,300	13,300	0	26,600
Press	0	0	5,000	5,000	0	10,000
Meetings, Workshops, Training (MOCS)	0	0	378,000	378,000	0	756,000
Grassroots Workshops	0	0	50,000	50,000	0	100,000
Special Activities (Puppets, Contests, etc)	0	0	50,000	50,000	0	100,000
Total	*369,300*	*35,000*	*686,300*	*586,300*	*0*	*1,676,900*

(5) Evaluation & Research

	FY 92	FY 93	FY 94	FY 95	FY 96	TOTAL
Baseline KAP	40,000	0	0	0	0	40,000
Pilot Res (throughout)	0	40,000	0	0	0	40,000
Mid Term (National)	0	0	40,000	0	0	40,000
Final (National)	0	0	0	40,000	0	40,000
Video Process Documentation	8,000	8,000	8,000	8,000	8,000	40,000
Total	*48,000*	*48,000*	*48,000*	*48,000*	*8,000*	*200,000*

(6) Other Costs

	FY 92	FY 93	FY 94	FY 95	FY 96	TOTAL
Stationery	1,000	1,000	1,000	1,000	1,000	5,000
Postage	525	525	525	525	525	2,625
Fuel & Oil	8,400	8,400	8,400	8,400	8,400	42,000
Vehicle Maintenance	2,800	2,800	2,800	2,800	2,800	14,000
Licensing Insurance	700	700	700	700	700	3,500
Total	*13,425*	*13,425*	*13,425*	*13,425*	*13,425*	*67,125*
GRAND TOTAL	**833,811**	**361,584**	**995,984**	**845,384**	**53,101**	**3,089,864**

ANNEX M

THE DISTRIBUTION OF EDUCATIONAL MATERIALS TO PRIMARY SCHOOLS

SEPTEMBER 30, 1991

THE DISTRIBUTION OF EDUCATIONAL MATERIALS

TO PRIMARY SCHOOLS

USAID

MALAWI INSTITUTE OF EDUCATION

JUNE, 1991.

THE DISTRIBUTION OF EDUCATIONAL MATERIALS TO PRIMARY SCHOOLS IN MALAWI

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INTRODUCTION

This paper outlines and analyzes the distribution system of educational materials to primary schools in Malawi, and proposes changes that will improve the effectiveness of the system. The study has been financed and supported by USAID's GABLE (Girls Attainment in Basic Literacy and Education) programme, and forms part of the program's efforts at improving the quality of education through an increased supply of learning materials.

The paper describes the system of materials supply and distribution to primary schools in Malawi. This includes a discussion of problem locations, major resource constraints, and management problems. Finally the paper suggests alternative methods to improve the effectiveness of the system and their anticipated benefits.

The study was carried out in May 1990, by a team comprising an independent consultant, Shobna Chakravarti, two researchers from the Malawi Institute of Education (MIE), Mr. W.E. Chauluka and Mr. E.K. Ndige. A USAID staff member, Mr. R Nyirongo, also participated in some of the data - gathering activities. The information used for the study is based on visits to 33 schools in 12 districts, and discussions with 16 District Education Officers (DEOs), the 3 Regional Education Officers (REOs), the Malawi Book Service, suppliers and manufacturers of educational materials, transporters, Ministries and the Malawi Institute of Education.

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II. THE CONTEXT

Educational progress in Malawi since independence has been intermittent. From independence up to about the 1980s, Government's policy had been to invest its resources in directly productive rather than social sectors. Government's first real attempt at supporting the education sector was seen in its first formal Education Plan for Malawi, covering the period 1973 - 1980. This was limited in scope as it did not incorporate all levels of the formal education system. The second Education Plan (1985 - 1995) is considerably more ambitious in its scope, covering all levels of formal education as well as the various parastatal organizations which are linked to the MOEC.

The Government of Malawi, through its efforts to implement the second Education Plan, and through its "Statement of Development Policies" (DEVPOL) for 1987 - 1996, has undertaken to develop an efficient and high quality system of education of a type and size appropriate to available resources and to the political, social and economic aspirations of the nation. The objectives include ensuring access to educational opportunities, and improving the quality and efficiency of the system. With respect to primary education in particular, DEVPOL is committed to increasing substantially the provision of materials per pupil, and to restructuring the system for the distribution of educational materials.

In line with these objectives, the rationale for the present study is to examine a core and basic aspect of the education system, namely, the current procedure for the distribution of educational materials to primary schools.

III. PRESENT DISTRIBUTION SYSTEM

A study of the situation in all the schools visited has made it evident that there is a need for improving the supply and distribution of educational materials. Various institutions are involved in the distribution of books and stationary, but this has not proven very satisfactory. The distribution network in Malawi of educational materials to primary schools clearly needs strengthening. This Section will analyze the various component steps in the procurement, supply and distribution chains, and the people and institutions involved in them.

A. CURRENT PROCUREMENT PROCEDURE

1. ROLE OF THE SCHOOLS:

(i) Most of the schools visited indicated that it is the headmaster of the school who identifies the educational materials needed by the school for the year. This is normally done in October, at the start of the school year. The DEOs added that this is done in conjunction with the District Inspectors of Schools (DIS) who visit the schools. Only a few heads interviewed started the planning process ahead of the school year. In determining the needs for the year, they look at the enrollment figures for the school, number of teachers, and number of materials already in stock.

(ii) Once the needs have been identified, the headmaster takes or sends the request, listing the school's requirements to the DEO. This is done by mail or in person depending on the proximity of the DEO's office. Some of the schools using the postal services lack the funds to purchase stamps and envelopes, and the requests are posted as they are, without being enclosed in an envelope. Requests by schools to DEOs for educational materials are made a minimum of three times a year, and in most cases more than that, whenever a need arises. Those heads who go to the DEO's office in person are at an advantage, because if the DEO has any of the materials in stock, he will usually give some to the requesters to take back with them. The remainder is either sent or collected later.

2. ROLE OF THE DISTRICT EDUCATION OFFICERS:

The DEO's role in the supply and distribution of materials to schools is crucial. As a first step, he receives the requests from the school, listing their needs. If his office has any materials in stock, these are supplied immediately to the schools. Usually the procedure is that the DEO will make out an order based on the budget he has for each school. The DEO's budget for education materials - i.e. exercise books and stationary is based on school enrollments, and is drawn from the school fees collected. The portion going to materials (currently MK 2.50) is known as Tuition Fees. These are divided into 5 parts: 80% goes towards consumable equipment, i.e. exercise books and stationary (i.e. paper,

pencils, rulers, other writing or mathematical instruments, and registers); 5% on maintenance of school buildings; 7% is used for the procurement of permanent equipment in schools, such as desks and chairs; 4% is spent of sports meetings and equipment, and the remaining 4% goes towards needlework equipment. The tuition fees, which were last raised in 1983, are: K2 for standards 1 to 5, and K4 for standards 6 to 8.

The order is then sent to MOEC, with a copy to the REO, or only to the REO who will then forward the request to the MOEC. The order never includes text books, as these needs are determined by MOEC, which will have them delivered to the REOs, who in turn send them to the DEOs. Once the MOEC receive the orders for exercise books and stationary from the DEOs, they look to see if the DEO's budget can meet the requirements on his list. If they find that the budget is inadequate, they adjust the figures on the list and place an order with MBS. The materials are then either delivered by MBS to the DEOS, or collected by them from MBS headquarters, or MBS outlets. These are then subsequently distributed to the schools. The whole process, from needs identification by the primary schools to the time the materials reach the DEO's office, takes on average approximately 3 to 6 months.

3. ROLE OF REGIONAL EDUCATION OFFICER:

The REO's role with respect to the distribution of educational materials to primary schools concerns only textbooks. He acts primarily as a middleman. He merely receives the textbooks from MBS and these are subsequently delivered to the DEOs. He also receives copies of the orders for educational materials placed by DEOs through the MOEC. Occasionally he has to forward the orders to MOEC on behalf of the DEOs. The 3 REOs interviewed had the following to say regarding the distribution of text books:

(i) REO FOR CENTRAL REGION:

The textbooks are sent to the REOs office throughout the year, starting from August/September. They are delivered as and when they are published, on average about five times a year. The books are usually delivered by MBS to the REO. Occasionally the REO collects them from the MBS branch in Lilongwe. Once the books are received, they are stored in the corridors of the building as there are no proper storage rooms. The REO then borrows a vehicle from MOEC or teachers training colleges to make deliveries to the DEOs. The REO never hires vehicles as it would be very costly to do so. He never uses the office's vehicle, a landrover to make deliveries as it is too small to transport all the books. If he were to use the landrover, he would have to make several trips in order to cover all the districts, and the cost of this would be very high. The biggest obstacle he sees affecting the distribution of materials is inadequate and inappropriate transport.

(ii) REO FOR SOUTHERN REGION:

The REO's role here is to receive the textbooks delivered by MBS. He is never informed as to how many books to expect, or when they are to be delivered. Consequently the REO was unable to state how many books on average his office receives per term. MBS delivers the books sporadically, in batches. This does not allow for proper planning . The REO's view is that it would be more cost-effective if all the books were delivered at the same time , so that they could then be distributed in one trip to all the DEOs. The major constraints he saw affecting the distribution of materials were lack of proper planning, inadequate transport, and lack of qualified stores officers.

(iii) REO FOR NORTHERN REGION:

Here too the REO receives books on an ad hoc basis. In this instance, MBS rarely deliver the books; they normally ask the REO to collect them from the MBS outlets. When MBS does make the deliveries, transport charges are very high - they amount to about K2,000 per delivery. MBS transport charges to the North are 40t per tonne km if a small van is used, and 75t per tonne km if a 5-tonne truck is used. The REO prefers to hire vehicles from PVHO, rather than using his office vehicle to collect and deliver materials. He does not use the office landrover as it is more cost-effective in the long term to hire a vehicle. This is in spite of the fact that PVHO charges are very high. The REO sees the major problems in the distribution of educational materials as being:

(a) Inadequate transport/funds;
(b) Inadequate funds to maintain vehicles;
(c) Inadequate storage facilities at REOs, DEOs and schools;
(d) Lack of proper record-keeping systems at DEOs and Schools.

4. ROLE OF MINISTRY OF EDUCATION AND CULTURE, HEADQUARTERS:

MOEC plays a central coordinating role in the distribution of educational materials system. The Ministry has ultimate responsibility for the provision of educational materials, and specific responsibility for policy-making, allocating budgets and placing orders for the supply of educational materials.

With respect to textbooks, it is the Ministry's responsibility to determine the needs of schools and the numbers to order. They then place the order with MBS, who subsequently deliver them to the REOs. So far as exercise books and stationary are concerned, it is the DEO's role to make up the orders on the basis of the estimated enrollments at schools. This is usually done soon after the headmasters have submitted the lists of their requirements. These orders are then sent to the Primary Section of MOEC. At MOEC the order is compared with the DEO's budget to determine whether the balance on the ledger can meet the requirements of the order. If the funds are inadequate, MOEC either reduces the order and places it with MBS, or alternatively they advise the DEO that the order cannot be

placed until the additional fees (of K1 per pupil) have been collected as the funds are insufficient on the current budget. This further delays the whole distribution process. If the order is approved as it is, it is placed with MBS. The DEO's budget is determined according to the enrollment figures in all the schools in the district and so far as the school materials are concerned, is made up from tuition fees.

In addition to looking at the budget, the Primary Education Officer (PEO) also takes into account the time of year in which the request is made. If the order is large and is for the first term, then it is likely to be approved without much delay. If however, the order is for the second term, or even third, when the school needs should be considerably less, then an investigation is made on previous orders to determine whether the past orders have been genuinely exhausted.

The request from the DEOs takes about one week to reach the MOEC unless the order gets misfiled, in which case the Primary Section take much longer to process the order. This is finally placed with MBS.

5. ROLE OF MALAWI INSTITUTE OF EDUCATION (MIE):

MIE is a parastatal body. It was established by an Act of Parliament in 1979 and became fully operational in 1982. The MIE's responsibilities include developing and producing learning and teaching materials for the primary education system. Thus, the MIE designs and produces teachers guides and textbooks. Because of the small numbers involved, MIE publish the teachers' guides themselves. The textbooks are published by DZUKA and printed by Blantyre Print and Packaging (BPP). The books are distributed by MBS. UNESCO/UNDP are now in the third phase of a project at MIE which is designed to help GOM to improve its primary education curriculum and to train teachers to use it more effectively. The objectives of the project include producing a new improved school syllabus for standards 1 to 4 with accompanying draft textbooks for pupils and instructional materials for teachers. The first set of textbooks and teachers' guides in all the subjects for Standard 1 is expected to be launched in October 1992. The intention is to produce eventually over 300,000 textbooks per standard, per subject, with the objective of having one book per pupil. The World Bank is supporting the production and distribution of textbooks in core subjects for standards 1 - 4.

6. ROLE OF MALAWI BOOK SERVICE:

Without doubt MBS is currently the most important supplier and distributor of educational materials throughout Malawi. MBS is a parastatal body and was established in 1964 by an Act of Parliament. The primary reason for creating MBS was so that it would service, assist and promote the education system by acting as central suppliers of educational supplies to schools and other educational establishments in Malawi, as well as to retail traders. MBS supplies textbooks to REOs and the other educational materials to DEOs. It is effectively the sole distributor to primary schools. Seventy percent of MBS' business is with MOEC. However there are a series of problems in the actual working of this system:

MBS is not a cost-effective organization. Its prices are much higher than other suppliers, and its distribution system is not working very efficiently either.

Thus as it stands, MBS is clearly not fulfilling the role for which it was set up, and is not able to effectively meet the supply and distributional needs of primary schools for materials. Its parent ministry, Education, not being business-oriented, does not exercise sufficient control over it. It also clearly suffers from a lack of sufficient vehicles to transport books and equipment to the districts - a problem which is well known.

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B. EDUCATION BUDGET

MOEC in Malawi is allocated a relatively small portion of total Government funds. A very small share of the education budget goes towards instructional materials. Most of the budget is spent on teachers salaries and physical facilities. There is a need for more financial resources to be channelled for educational materials.

The total Government Recurrent Budget is as follows:

1989/90 - the actual expenditure was:	K1009.650 million.
1990/91 - the budget was:	K1168.740 million.
1991/92 - the budget was:	K1331.412 million.

The figures for the total Education Recurrent Budget are:

1989/90 - the actual expenditure was:	K83,911,682. (8.2% of GOM budget).
1990/91 - the budget was:	K87,000,000. (7.4% of GOM budget).
1991/92 - the budget was:	K94,519,410. (7 % of GOM budget).

The allocation to DEOs for the administration of Primary Schools is as follows:

1989/90 - the actual expenditure was:	K51,210,069.
1990/91 - the budget was:	K47,222,754.
1991/92 - the budget was:	K52,587,301.

From the above, the amounts on salaries for Primary school teachers alone were:

1989/90 - the actual expenditure was:	K45,993,285.
1990/91 - the budget was:	K40,632,055.
1991/92 - the budget was:	K45,676,410.

Thus it can be seen that the balance left after payment of teachers' salaries is very little. This is spent on the administrative duties of the DEOs, and this includes services for Primary Schools. The normal functions of the DEOs take up most of the remaining allocations, and in the end very little is left for distribution.

MOEC allocates K2 million a year for the replacement of textbooks. This is known as the replacement fund. In addition parents contribute K1 million annually (K1 per pupil) for textbook replacement as part of school fees. The source of funds for exercise books is the income generated by tuition fees. Eighty percent of this goes towards the procurement of exercise books and stationary.

A new component in the Primary Education Recurring Budget is the provision of allocations for the maintenance of vehicles. Provision for this was never available in the past budgets and this was only introduced in the 1991/92 budget.

C. AVAILABILITY OF EDUCATIONAL MATERIALS IN SCHOOLS:

Past experience and studies have shown that learning and instructional materials are crucial inputs to assuring high quality instruction in schools and to raising student achievement. The present system fails to provide adequate educational materials to the primary school pupils. This is partly due to the lack of availability of sufficient materials, but primarily due to the inefficiency of the present distribution system. MIE is currently involved in an ambitious plan to raise the quality of instructional materials and to increase substantially the numbers of books. The proportion of learning and instructional materials is therefore expected to increase significantly during the present decade, and it is therefore even more crucial that the issue of distribution be urgently addressed and resolved.

In the meantime the current situation is that the provision of adequate educational materials is well below the requirement of the pupils. Textbooks and exercise books are in chronically short supply in most of the schools. Visits to some of the schools revealed that the ratio of pupils to textbooks in each class was on average 4:1. Indeed, in some classes the ratio was as high as 10:1, and in one of the schools visited in the North, there were no textbooks at all in some classes. Similarly with teachers' guides, the ratio of teachers to guides is high, averaging about 3:1, and in some schools there were none available. The availability of exercise books too is inadequate. In fact in one of the schools visited, no exercise books had been provided at all during the 1990 - 91 school year. On average pupils are provided with about 2 exercise books a year, which, given the number of subjects taught, is well below the requirements. The minimum requirements for 80 - page exercise books for instance are approximately:

Standards 1-2: two exercise books a year;
Standards 3-5: six exercise books a year;
Standards 6-8: ten exercise books a year.

Blackboard paint is one item that does not seem to be provided at all. Yet, all that would be required is one 500 ml container of blackboard paint per class per year. The provision of chalk averages about 10 boxes per school a term. The average amount of chalk required per term is about 15 boxes. Stationary, e.g. pencils, pens and rulers are rarely, if ever provided to schools.

The problems of availability of materials and their distribution may be somewhat alleviated in the near future. ODA has expressed a strong interest in putting general budgetary and technical support in the production and distribution of educational materials to Primary Schools.

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D. OVERVIEW OF THE DISTRIBUTION PROCESS:

The main distributor of educational materials is MBS. Only teachers' guides, which are published and printed by MIE fall outside the MBS scope of activity. These are delivered by MIE directly to the REOs.
Text books are ordered directly by MOEC and these are supplied and delivered by MBS to the 3 REOs. MBS makes the deliveries to the REOs in the south and Central regions; the REO in the North collects them from MBS. MBS transport charges vary in the different regions and districts. For instance in Blantyre, when questioned, MBS stated that their transport charges are 40t per tonne km regardless of the area, type and size of vehicle used. This is not in fact the case. For example, if deliveries are made to the north, the REO has to pay MBS 40t per tonne km for deliveries made in a small van and 75t per tonne km if a 5 tonne lorry is used. The overall transport costs to the REO in the North are therefore very high. As a result, the REO in the North normally collects the materials from MBS in Blantyre. He hires a vehicle from PVHO, where in fact the transport charges are also high.

The REOs subsequently deliver the textbooks to the DEOs who in turn distribute them to the schools.

Orders for exercise books, chalk and stationary are also placed with MBS by MOEC. Thirteen of the sixteen DEOs interviewed stated that MBS delivered the materials to them. Two, the DEOs at Chitipa and Nkhata Bay, mentioned that they sometimes have to collect them from MBS in Blantyre. With respect to the DEO in Nkhotakota, MBS send the materials by rail to Salima, and the DEO has to hire a vehicle from Nkhotakota to collect them at considerable cost. Nearly all the DEOs stated that they deliver the materials to schools, although some added that nearby schools sometimes collect them. This was contradicted by the majority of headmasters interviewed, who indicated that they have to collect the materials themselves from the DEO's office most of the time. This is done at their own expense as they have no means of transport at their disposal. The form of transport used varies; some walk, some bicycle, while a few travel by bus. Only one headmaster was in a situation where he could not collect the materials himself even though they were not being delivered by the DEO either, his school lacked books of any kinds.

IV. PROBLEMS WITH THE PRESENT SYSTEM

MANAGEMENT / MONITORING:

There are no proper monitoring systems, or proper record-keeping/inventory methods followed in schools. It is therefore difficult to determine whether educational materials are always reaching the schools, and if they do, when and in what quantities. There is no way of ensuring that the materials are in fact being distributed to the pupils once they reach the schools. Headmasters in schools are not versed in management and monitoring skills. Consideration should therefore be given to training headmasters in these skills.

RECORD-KEEPING:

There are no proper record-keeping systems at the REOs, DEOs, or the schools. As a result, Heads, DEOs and REOs visited were unable to state with any certainty how many materials they receive or expect to receive in a given term. In one of the schools visited, the Headmaster stated that few if any of the pupils had books of any kind. On visiting the classes it was found that this was indeed the case. However the headmaster's office was in fact well stocked with books. On being questioned about this, the headmaster stated that they were being stored because they were too old for use by the pupils. Some of the books admittedly were quite worn out, but most appeared to be useable.

LIFE OF BOOKS:

None of the books in the schools visited were covered or properly stored and maintained properly. The physical life of the textbooks and teachers' guides could be considerably lengthened if they were stored and used properly. The physical life of the books is naturally considerably reduced if children were to take them home - especially when they do so every day. However, storing them in the schools under the present system is not proving very cost-effective either, because the storage conditions in all the schools visited are very poor.

In many schools worldwide children are encouraged to cover books in wrapping paper or newspaper. This has proven to prolong their life.

PLANNING:

Most of the schools visited do not plan their requirements for the year well ahead of the school year. The majority of schools start the needs identification process only in October, the same month the school year begins. As a result, there is a considerable delay by the time they receive the required material. It is not uncommon for headmasters to be receiving materials for the year as late as in the third term. A good monitoring and management system in schools would address the issues raised so far. The current position is that the District Inspectors of Schools (DIS) are supposed to visit and inspect schools regularly. Their

duties do not specifically include monitoring the passage of educational materials. Their task is mainly to inspect teaching methods and curricula, and check up on attendance records. According to the DPMT report, they visit schools at most once a year, and quite often once in 5 years. These visits are very brief and therefore not fruitful. They face the same problems common within the education sector. They lack reliable transport to take them to all the schools, and so only a few schools within easy reach are visited. This is partly due to the fact that primary schools in Malawi are scattered over vast areas and many are not easily reached by public transport. According to the DPMT report on The Organizing and staffing of MOEC, the inspectors' visits to schools last no more than about 35 minutes per school.

STORAGE:

Storage facilities at all levels are inadequate. Suitable and adequately ventilated, dry buildings and strong shelving are non-existent. Deterioration, damage and losses to stocks occur partly because of unsuitable storage space and partly because of inadequate staffing and accounting systems. Most of the REOs, DEOs and Schools interviewed lacked proper storage facilities. The REO for the Northern region stores the books he receives in the nearby Mzuzu secondary school old building, and in the IDA warehouse. The other 2 REOs use the corridors of their buildings for storage purposes. Most of the DEOs also lack adequate storerooms for keeping the materials.

In schools, the problem is even greater. Only one school visited had suitable storage space. This was an urban school in Blantyre which had been built with IDA support. Fourteen of the headmasters interviewed stated that their storage facilities were adequate. However they were referring to their offices rather than proper store-rooms. Seven headmasters stored the materials in their homes because they were safer there than in the offices. Most had experienced burglaries in their offices. Headmasters also expressed concern over the quality of their school buildings. During the rainy seasons, most of the ceilings leak, and as a result books get damaged.

DISTRIBUTION:

All efforts to supply adequate educational materials will continue to be nullified in the absence of an effective distribution network. Distribution of materials is a most important operation which does not appear to have received the attention it deserves from Government. MBS is the most important distributor of educational materials to primary schools throughout Malawi. It is also generally agreed by the people interviewed, that its services leave a lot to be desired.

Transport is one of the major problems which impedes distribution of educational materials. Not only is it difficult to transport materials from MBS to the districts, but in some areas there is no transport at all. Even when the books and stationary arrive at the regional and district education offices, they normally remain there for long periods of time

because there is no transport from there to cover distances which vary from about 20 kilometers to 100 kilometers. The problem of transport is not only caused by a lack of vehicles. Some roads are impassable during most of the rainy seasons. Government vehicles are over 10 years old and constantly break down, and the fuel allocation to DEOs is never adequate.

Transport and communication problems have made delivery to schools very difficult. Problems are experienced at all levels:

MALAWI BOOK SERVICE:

MBS is charged with the responsibility of delivering textbooks to the REOs, and exercise books and stationary to the DEOs. They seem unable to make deliveries to the REOs in the North, who in turn has to hire vehicles to collect them either from MBS headquarters or from MBS outlets in the region. Deliveries to the REOs are erratic and are done sporadically. This means that the REOs cannot properly plan how to distribute them to the schools, as they are never sure of the quantities they are supposed to receive.

REGIONAL EDUCATION OFFICERS:

Once they receive the textbooks from MBS, the REOs are supposed to deliver them to the DEOs. As a starting point, they themselves experience delays in getting the materials. Once they receive the materials, they are unable to deliver them immediately because of transport difficulties. Their own vehicles are inadequate for a number of reasons: they are small - i.e. a 10-seater landrover, and therefore not equipped to transport large quantities of books; the vehicles are well over 10 years old and therefore in very poor conditions. They are always breaking down, and then have to be repaired at high cost. Allocations for fuel and maintenance of the vehicles are very low. The costs of hiring vehicles, which is what they resort to in the end, is very high. This is in spite of the fact that they are hired from PVHO, a government body. Sometimes the DEOs end up collecting the books themselves because the REOs are unable to deliver them. Thus there are considerable delays and problems encountered in getting the books eventually to the DEOs.

DISTRICT EDUCATION OFFICERS:

The DEOs face similar problems with transport as those encountered by the REOs. It has been seen earlier also that a very limited amount of funds are left in the end in the DEOs budget for distribution purposes. Thus it is not surprising to find that of the 33 schools visited, only 5 were able to report that DEOs deliver the materials to their schools. (The 5 schools referred to are: Dema-School, in Nkhotakota; Edundu School in Mzimba; Mpale School in Chitipa; Tsupe School in Mwanza; Ilengo school in Chitipa.)

SCHOOLS:

Schools have no means at their disposal to collect the materials from the DEOs offices. However, those headmasters who wait for the materials to be delivered by the DEOs may end up waiting for a considerable period of time before getting them, or they may end up not getting them at all. They therefore have no choice but to use their own initiative to collect the materials themselves, somehow. Nineteen headmasters stated that they always collect the materials themselves, using different means of transport. Nine stated that sometimes they collect the materials, and at other times the DEOs deliver. When collecting the materials, 18 headmasters use public transport, i.e. buses, 6 went by bicycle, and 7 sent pupils on foot. Only one head indicated that he sometimes hires a vehicle. The cost of collecting the materials is borne by themselves and they are rarely reimbursed. Thus, materials are often carried by the pupils or headmasters on their heads, by bikes, and sometimes by the more conventional methods of bus and lorry. It sometimes takes 6 months, and occasionally even longer to get the books to the schools. This has made the planning of delivery to coincide with the school year very difficult. Usually it means that books and materials arrive late particularly at the remote schools.

FINANCIAL ANALYSIS:

I. PRICES OF MATERIALS

There is no price control on educational materials in Malawi and prices are not printed on books. Government lack a system of calculating the cost and selling prices of books to determine whether the prices are reasonable. This section outlines the various sources of supply to MBS, and compares the suppliers' prices with those of MBS.

A. TEXTBOOKS

These are designed and produced by MIE, and published by Dzuka, a small publishing subsidiary of Blantyre Printing and Packaging, which has a monopoly on local textbook printing. MIE is unable to publish their own books as their printing capacity is limited. Dzuka's main activity has been to control the very substantial reprint programme of MOEC. The textbooks are then supplied to MBS who then distribute them. MBS' textbooks distribution service consists mainly of delivering reprints from BPP to the REOs. MBS obtains a discount of 20% on a net price charged by Dzuka, and charge MOEC the full net price. A sample list of MBS prices and those of Dzuka (if MOEC ordered directly from them) is listed below:

TEXTBOOK PRICES:

ARITHMETIC TEXTBOOKS	MBS	DZUKA PRICES MINUS 20%
Book 1	K 3.00	K 2.40
Book 2	K 3.45	K 2.76
Book 3	K 5.40	K 4.32
Book 4	K 5.56	K 4.52
Book 5	K 6.15	K 4.92
Book 6	K 6.02	K 4.82
Book 7	K 6.15	K 4.92
Book 8	K 7.05	K 5.64

B. EXERCISE BOOKS:

These are manufactured by Blantyre Paper Converters (BPC) another subsidiary of Blantyre Print and Packaging (BPP). MBS pays BPC 72t for one 80 page exercise book, and sells the same to MOEC for 94t., making a profit of 22t. per book. The exercise books are then distributed to the DEOs with additional charges for transport. Below is a list of prices of books sold by MBS to MOEC, and a list of prices BPP are willing to offer MOEC. The BPC prices to Government include delivery to DEOs.

EXERCISE BOOKS

	80 pages per 100	40 pages per 100	20 pages per 100
MBS prices to MOEC	K 94.00 excl. delivery	K 55.00 excl delivery	-
BPC prices to MBC	K 72.33	K 42.18	K 20.30
BPC prices to MOEC	K 67.86 incl. delivery	K 40.18 incl. delivery	K 18.72 incl. delivery
	K 65.31 excl. delivery	K 38.67 excl. delivery	K 18.02 excl. delivery

From the above, it is clear that considerable savings would be made by Government if they ordered directly from the manufacturers. MBS prices range from 37% to 39% more than those offered by Blantyre Paper Converters, and in addition extra expenditure has to be further incurred on transport. The reason given by Blantyre Paper Converters for supplying the exercise books considerably cheaper to MOEC, is that if BPC were to deliver exercise books directly to Government, they would then be exempt from having to pay duty on the paper which is imported to manufacture the books.

CHALK AND BLACKBOARD PAINT:

This is also supplied by MBS. MBS buys chalk locally and also imports. The reason given for importing chalk is that local suppliers cannot meet the demand, and also that it is more cost-effective to import. MBS buys the local chalk from Blantyre Chalk makers (BCM). Local manufacturers deny that they cannot meet the demand for chalk. The managing director of BCM stated that their current capacity to make chalk is 21,000 sticks per day (i.e. 210 boxes a day containing 100 sticks). They expect to double their current output of chalk by the end of 1991, as they have recently ordered another machine. Valmore Paints also manufacture chalk,

although MBS does not buy from them. They therefore supply chalk directly to Government, to the Controller of Stores. Their capacity is 40,000 sticks a day, i.e. 400 boxes a day. The amount required on average per year in a school amounts to about 45 boxes of chalk. Thus, 2700 primary schools would require approximately 121,500 boxes of chalk a year. It is therefore clear that local capacity can more than meet the demand for chalk. Valmore Paints also manufacture blackboard paint. One 500 ml container of blackboard paint covers 3 square meters, i.e. one blackboard. Blackboards need to be painted only once a year. The various prices are listed below:

CHALK AND BLACKBOARD PAINT

	Normal 100 per box	Dustfree 100 per box	Blackboard Paint 500 ml.
MBS	K 7.26	K 8.45	K 8.19
BCM	-	K 6.50	-
Valmore Paints	K 3.45	K 5.49	K 5.87 (black)
Imported by MBS	K7.26	-	-

Thus, with respect to normal chalk, MBS prices are 110% more than those of Valmore Paints. MBS' dustfree chalk is 30% more than Blantyre Chalk Makers, and 54% more than the prices of Valmore Paints. Blantyre Chalk Makers' prices (from where MBS buy the local chalk), are 18% more than those of Valmore Paints.

II. COST OF TRANSPORT:

Deliveries of educational materials to REOs, and DEOs are made primarily by MBS. As stated earlier, although MBS claim to charge a flat rate of 40 t per tonne km regardless of size of vehicle and area, their prices do in fact sometimes vary as follows:

MBS TRANSPORT CHARGES:

Standard rate	40 t per tonne km
To Nkhata Bay DEO	50 t per tonne km
To Mzuzu DEO	50 t per tonne km
To REO North	40 t or 75 t per tonne km
To Dedza DEO	45 t per tonne km
To Kasungu DEO	No charges as they ask MBS to include their consignment with MBS' other deliveries to their outlet in Kasungu.

The REOs hire vehicles from PVHO to deliver textbooks to DEOs, and the DEOs occasionally hire vehicles from PVHO or District Councils to deliver materials to the Schools.

The costs of hiring vehicles from PVHO are:

Station Wagon (4-wheel drive): i.e. Landrover - 10 seater.	78t per km; + K130.18 fixed daily charge; + K25 daily for driver; + fuel costs.
Pick-up (4-wheel drive): Capacity: 1.5 tonne.	73t per km; + K122.13 daily charge; + K 25 daily for driver; + fuel costs.

Pick-up (Rear drive):

1.5 tonne Pick-up:	62t per km; + K120.00 fixed daily charge; + K25 daily for driver; + fuel costs.
2 tonne Pick -up:	69t per km; + K140 fixed daily charge; + K25 daily for driver; + fuel costs.

Vans (closed):

Light Van	48t per km; + K125.00 fixed daily charge; + K25 daily for driver; fuel costs.
1.5 tonne Van	65t per km; K145.00 fixed daily charge; K25 daily for driver; fuel costs.

Trucks:

3 tonne	90t per km; + K 116.93 fixed daily charge; K 25 daily for driver; + fuel costs;
5 tonne	K 1.20 per km; + K 135.00 fixed daily charge; + K 25 for driver; + fuel costs.
6-tonne truck:	K1.32 per km; K 153.48 fixed daily charge; + K 25 for driver; fuel costs.
7-tonne truck:	K1.44 per km; + K 171.88 fixed daily charge; + K 25 daily for driver. fuel costs.
12-tonne truck:	K1.62 per km; + K 190.53 fixed daily charge; + K 25 daily for driver. fuel costs.

DEOs sometimes hire vehicles from District Councils to transport materials to schools. Lilongwe District Council's transport costs are: 6-tonne truck: K4.00 per km. This amounts to about 67t per tonne km and therefore much higher than the commercial rates.

Fuel and Maintenance of vehicles' costs allocated to DEOs when they use their own vehicles are very limited, and vary from district to district. These allocations are not specifically for distribution of educational materials to schools, but include costs of transport for other functions of the DEOs.

V. ALTERNATIVE OPTIONS

As noted, Malawi's distribution system is highly centralized and channelled through the distribution and warehouse circuit of MBS. However, it is apparent that the present system of distribution of educational materials clearly needs to be reformed and strengthening. Indeed the problems of distribution have been underestimated and insufficiently provided for in Government planning. Current distribution channels in Malawi are inadequate, and competition is practically non-existent. In actuality, the whole ststem of distribution of educational materials is disorganized and unsystematic. The task becomes more difficult when transportation facilities are inadequate and purchasing power is low.

This section proposes changes that will improve the effectiveness of the distribution system. Opportunities for improving efficiency exist at every level of the distribution process.

SUGGESTED SYSTEM CHANGES

1. PLANNING OF SCHOOL NEEDS:

Planning shortcomings, in particular, have a serious impact on Primary Education and its future. As a first step, the identification process of school needs should be planned well ahead of the school year. The estimates of the requirements should be made as early as April in the school year, and the order should cover the requirements for the entire year. The list of requirements should then be taken without delay to the DEO who should process the order and send it to MOEC within the same month. By the beginning of May, the orders should have been placed with the suppliers, and the whole distribution process should ideally be complete by September, a month ahead of the start of school. The distribution system would operate more efficiently if the schools were able to forecast book and stationary requirements in advance. It is therefore recommended that headmasters be trained in management and planning methods to ensure the efficient working of the system.

2. REOS:

The present system of delivering textbooks to REOs needs to be reconsidered. Firstly, the REOs do not have adequate storage facilities, and therefore deliveries cause space problems in offices and corridors. Secondly, the REOs lack the distribution expertise and resources, and books often lie in these conditions for over a month while waiting for transport. Finally deliveries of other educational materials are already being made directly to the DEOs, and it would therefore be time-saving and cost-effective if textbooks too were delivered directly to the DEOs. It is therefore recommended that so far as the distribution of educational materials is concerned, REOs should not be involved in the process.

3. THE SUPPLY OF EDUCATIONAL MATERIALS:

The present position is that there is an inadequate supply of educational materials in all the schools visited. 4 or more pupils share textbooks at a time, pupils are given on average on 2 exercise books a year, stationary is severely limited or unavailable, blackboard paint is never supplied, and chalk is always inadequate. The paper has already outlined some of the prices manufacturers are willing to offer. Even without negotiation, if Government bought materials directly from the manufacturers instead of MBS, huge savings could be made. With those savings, more materials could then be purchased and distributed. As has been seen, considerable savings could be made on exercise books, chalk and blackboard paint. With respect to exercise books, paper comprises about 60% of the cost of producing exercise books. Government could therefore consider buying the paper directly from outside suppliers and provide these to BPP. In addition Government should consider importing in bulk some of the other educational materials. The availability of textbooks and teachers' guides is expected to improve in the near future. World Bank is supporting MIE's efforts at developing, producing and distributing textbooks and Teachers' Guides for standards 1 to 4 under the Second Education Sector Credit.

MIE is involved in the production of these, and the intention is to provide eventually one textbook per pupil. MIE will be involved in the printing of the teachers' guides, and the textbooks will be submitted for international bidding.

MBS is currently the sole distributor of educational materials. Whilst the principle of having one central procurement and distribution agency is an appealing one in theory, experience has shown that the system has not been working very efficiently or proven to be cost-effective. MBS costs are high, and if they remain high, Government should seriously consider entering into negotiations with other local suppliers. The reason behind MBS having a monopoly is the interpretation that the Malawi Book Service Act, 1964, Chapter 30:03, required Government to treat MBS as the sole suppliers of educational materials to schools and other establishments. However, meetings are currently ongoing to determine whether the Act does in fact preclude MOEC from dealing with other suppliers. The view seems to be that MBS does not in fact have a monopoly by law. The discussions suggest that MOEC is interested in competitive bidding, and are therefore likely to consider approaching the open market. In view of the above, it is proposed that there should be a system of open tendering, with MBS competing with the other suppliers on the same terms.

4. SETTING UP A PROCUREMENT/COORDINATING UNIT IN MOEC:

Under the present system, safeguards to assure that books are actually delivered have not been adequate because of unsystematic accounting, storing and issuing systems. Inaccurate figures for school enrollments make it further difficult for DEOs to distribute materials in the right quantities. What is required is good planning, adequate storage, suitably qualified and experienced staff, efficient management and control of all

aspects of the work, and enough funds to see that it is done properly and the authority to use those funds in the best possible manner.

If MBS's role as a central distributing agency is to be reconsidered, then there is a need to establish an alternative system. It is therefore recommended that a small procurement and coordinating unit be set up within MOEC, to plan, coordinate and manage the whole distribution process. The Unit would consist of a maximum of 3 persons. The Unit's functions would include establishing procedures for bulk procurement from the manufacturers, and negotiating discounts for bulk purchases. The Unit would also be involved in establishing school needs based on the order already made up by the DEOs, placing the orders with suppliers, and coordinating the distribution process to the schools as proposed below. Such units in fact already exist in donor organizations, for example in UNICEF, and seem to work very well.

5. STORAGE:

Storage facilities at the REOs, DEOs and schools are not satisfactory. The problem is partially being addressed as efforts are currently ongoing to renovate the offices of 2 REOs and 13 DEOs. They include the construction of small storerooms. However the remaining 15 DEOs and the majority of schools continue to face this problem. World Bank and ADF are involved in the construction of school buildings and classrooms. The IDA and ADF supported schools however form only a small proportion of the total number of primary schools in Malawi. These schools now have adequate storage space in each class, consisting of areas measuring 720mm by 1300. The storage problems of the majority of schools however, especially those in the rural areas are not being addressed. This does not augur well for the life of books, as they are liable to deteriorate rapidly under unfavorable storage conditions. It is there suggested that the design of schools should in future have proper storage facilities. This idea should be integrated with ongoing or future donor activity in projects concerned with construction of buildings. Each storeroom could also include the installation of a records system, which would give headmaster, inspectors and MOEC complete and accessible information regarding every transaction.

6. MONITORING AND MANAGEMENT OF SCHOOLS' EDUCATIONAL SUPPLIES:

Under the present system there are no safeguards to ensure that the materials are actually reaching the pupils. It is suggested that there should be installed a school-based management and administration system whereby the headmasters' deputies deal primarily with administrative and management matters. This would include handling the distribution of resources which flow into the school. The DPMT report recommends a change in the role of the DIS in view of the fact that currently he is unable to make meaningful observations on his infrequent visits to schools. The suggestion is that each district be split up into inspection zones of a size which is manageable. Thus, for instance, a zone would have no more than 30 schools in it. If each zone were to be allocated an inspector, there would then be more regular visits to the schools. The DPMT report

also recommends that each inspector be given a motorcycle so that they do not have transport problems. One of the ideas is that the motorcycles should not form part of a Government pool but that the inspectors should be provided with soft loans to buy the motorcycles. Government would have to give the inspectors an allowance for fuel and maintenance. However this is an idea which requires more study. Inspectors should have regular meetings with the headmasters and their deputies rather than teachers to discuss and attempt to resolve problems pertaining to management, including the distribution of resources.
The schools should be provided with guidelines to follow, and the inspector encouraged to have regular meetings with headmasters to ensure that the guidelines are in fact being followed. The guidelines should specify the practices each headmaster is required to follow in the management and administration of his school.

The guidelines should cover the following areas in particular:

Advance planning of needs' requirements;

Storage and maintenance of books;

Proper record-keeping practices;

Methods of distribution to pupils once materials are received.

DISTRIBUTION OPTIONS

This section suggests alternative methods of distribution, including new channels. All the options mentioned need to be investigated separately, in terms of distance, cost and efficiency. In order for this to be done, it is first necessary to establish how the planning, identification, and ordering will be carried out, and the required periodicity of deliveries. It will then be necessary to conduct a logistics study to determine the most cost-effective and efficient system of distribution, including the possibility of using private transporters. Whatever option is chosen must be consistent with the new policy of Government to decentralize the decision-making and management of the Education Sector.

(I) MALAWI BOOK SERVICE: TO PROCURE AND DELIVER:

MBS is currently playing a role which is necessary and important. It has effectively become the nucleus of a nationwide distribution system. It has hitherto been supplying most of the educational materials and also distributing them. MBS has its own warehouse in each of the 3 regional centers, which would constitute a suitable base for regional distribution. MBS thus has the distribution expertise and resources which are ideally required for ultimate delivery to the schools.

However, the major drawback of continuing to utilize the services of MBS lies in their exorbitant prices. Thus, even though it is a parastatal organization and therefore has enjoyed the backing of Government, there is an increasing awareness in Government that it is not cost-effective to support MBS.

If the MOEC, its parent ministry, wishes to continue using MBS' services, it is vital that the ministry exercise more control over MBS. After all, MBS is in the end a parastatal body and not therefore independent. MOEC should remind MBS of its functions as set out in the MBS Act, Cap. 30:03, namely, "to serve, assist and promote the educational system and organization of Malawi".

This function as laid down by Parliament necessarily carries the clear implication that in "assisting and promoting" the education system, their prices too among other things shall be reasonable. This is clearly not the case. At the very least, MBS prices must be consistent with the rates offered by other suppliers. They should therefore be made to streamline their prices. The prices should be reviewed every year to ensure that they are in line with the prevailing prices on the market.

If MBS prices become more competitive, it would then be reasonable for MOEC to continue using MBS's services. Thus, MBS would continue both to procure and deliver educational materials to primary schools. On being questioned on their capability to deliver educational materials directly to the schools, MBS indicated that they would be willing to deliver directly to the schools provided they had more vehicles. Their own vehicles are already in 100% use, and therefore not capable of making

deliveries to the schools.

It is therefore recommended that MBS be given a number of vehicles on a lease - purchase basis strictly on condition that they use the vehicles for purposes of delivery to schools only. Meetings would have to be held with MBS to ascertain the minimum number of vehicles they would require for the specific purpose of transporting materials to each school. The terms and conditions of such an arrangement would have to be specified in detail. There must be regular reviews annually to ascertain that the distribution system is working efficiently. The overall transport costs to MOEC would then also be reduced considerably. Under this system MOEC would have to specify the quantities MBS would have to earmark for each school when placing the orders by a specific date. The disadvantage of this however is that trucks would lie idle in periods of slack delivery time.

(II) MBS TO DELIVER ONLY:

The second alternative, if MOEC considers competitive bidding for the supply of materials, is that MBS can compete with the other suppliers on the same terms. If another supplier is selected, MOEC would utilize MBS' services primarily for delivering the materials to all the schools on similar terms as in (I) above. The reason for suggesting that MBS continue distributing materials to schools is that it has the necessary infrastructure. It would then be necessary in addition to have a procurement and coordinating unit (as described in section 4 above) in the MOEC. The unit's task would be to place orders with the various suppliers, indicating to the suppliers the quantities in which the materials are to be packed and for which schools. These can be collected by MBS (or delivered to MBS by the suppliers), and MBS can then deliver them directly to the schools.

(III) OPEN TENDER TO PRIVATE TRANSPORTERS:

Private transporters could be hired to deliver the materials to the schools. This option would again necessitate the involvement of a procurement/coordinating unit. This unit would place the orders with the various suppliers, specify quantities of packages, schools and districts. The private transporter then delivers to the schools. There are a number of private transporters operating in Malawi which are used frequently by large companies, and which have been found to be efficient. The Malawi Commercial Transport Project in Blantyre recommended SIKU TRANSPORT as being one of the reliable and efficient private transporters. The information following concerning SIKU TRANSPORT is therefore just one example of the costs likely to be incurred in employing the services of a private transporter. The proprietor of the company has indicated that they are able and willing to make the deliveries directly to the schools. Their charges are 40t per tonne km, and possibly an extra 7t per tonne km if required to travel on dirt roads. In addition they have night charges if the driver is required to spend the night out on delivery. Night charges are high: K65 per hour for stationary time where the vehicle is loaded. The proprietor's suggestion was that the delivery routes should

be well planned so that no turnings back or repeats are necessary. Deliveries in the rainy season from December up to the end of March would be difficult, so planning should take that into account. To enable the drivers to reach the schools efficiently it might be a good idea to provide them with maps of each district pinpointing the location of the schools.

These rates could be compared with those offered by other private transporters to determine which transporter would be the most cost-effective. There are no extra costs for daily charges, fuel and maintenance of vehicles. If deliveries are planned so as to avoid having the driver spend the night away, it is economical to consider hiring private transporters. As already mentioned, SIKU are only one of a number of private transporters, and there would have to be an assessment made of all the transport companies and their rates and reliability. If this option is adopted, then it would be necessary to have regular reviews of the distribution operation to ensure that the system is working efficiently.

(IV) SUPPLIERS/TRANSPORTERS DELIVER TO DEOS + PROCUREMENT/COORDINATING UNIT + BICYCLES WITH TRAILERS:

BPP has already undertaken to deliver exercise books to DEOs at a minimal cost. The other materials could be delivered by MBS or private transporters also to the DEO. The Procurement unit would have to coordinate all the orders. Once the materials get to the DEO, they can be stored until they are collected by the schools.

To enable the schools to collect the materials on a more regular basis, they could be provided with a bicycle each. Brown & Clapperton (B & C), a manufacturing company in Blantyre, make bicycles with trailers. They have taken into account poor road conditions by making solid inner tubes which are more costly than the regular inflatable ones, but also more durable. The total cost of a bicycle with a trailer and the solid inner tubes would be K589.20. The trailer's capacity is 100kg of goods. The bicycle would be used by pupils or headmaster to collect the materials from the DEOs.

There are however a number of counter-arguments:

(i) Although there are no fuel or maintenance costs involved, there are likely to be recurrent costs for the repair and replacement of spare parts.

(ii) There are no bicycle repair shops in the rural areas to fix the bicycles if they break down.

(iii) Some of the schools are in very remote areas; the distances required to be covered would therefore be long.

(iv) Unfavorable road and weather conditions could make bicycling sometimes difficult.

(V) MIE AND PIU:

MIE is currently involved in a UNDP/UNESCO/World Bank supported programme of producing and publishing textbooks and teachers' guides for standards 1 - 4. The printing of the books which will be very large in number, will be submitted for international bidding. The distribution problems once these are printed are likely to be even greater, as there are a considerable number of books involved: about 300,000 textbooks per subject per standard. The suggestion made by an MIE staff member is that MIE should be made responsible for distributing the textbooks. This would entail looking for a donor agency to provide MIE with a minimum of two 7-tonne trucks, funds for building a warehouse at MIE, and hiring 2 full-time drivers. The cost of a 7-tonne HINO lorry in Malawi is about K156,000. The proposal is that the MIE would be responsible for making deliveries to the DEOs.

The implications of this proposal however that Government will have to increase MIE's budget to meet the costs of fuel and maintenance of the vehicles, and salaries for 2 drivers. This puts an additional strain on Government's budget. Furthermore, the issue of delivery from DEOs to the schools remains unresolved.

With respect to the issue of distribution of the textbooks, the suggestion made by a PIU staff member is that PIU assume responsibility for this task. The proposal includes:

(i) recruiting a total of 15 people; 3 are to be responsible for liaising with MOEC as to their requirement; 7 to pre-pack the books according to schools; 5 drivers to make the deliveries.

(ii) 5 trucks; 2 for the center, 2 for the south; and one for the north.

(iii) the construction of one large warehouse

Again the proposal is that distribution would be only to the district level. The cost implications for Government here are also similar to the MIE proposal above.

(VI) POST OFFICE:

The postal service could occasionally be used for delivery of smaller packages. The postal rates in Malawi are currently high relative to road transport rates. The possibility of negotiating special rates with the Post - Master General is one which could be investigated. Nearly all the schools have private post boxes or some postal address and so getting the books in remote areas would not be such a problem.

The Post Office offers 2 Services:

(i) LIBRARY BOOK SERVICE:

(a) 14t per book - any size, delivery to any destination;

(b) the maximum weight is 20kg.

(ii) PARCEL SERVICE:

(a) the maximum weight is 20 kg;

(b) minimum charge is K4.20 per kg.

It is recommended that this service be considered for only very small deliveries.

(VII) DELIVERY BY STAGECOACH:

Stagecoach offer a delivery service for unaccompanied parcels to all the major districts in Malawi. However, their rates are quite high. The rates for unaccompanied parcels from Mzuzu, Lilongwe and Blantyre are set out in the appendix.

In addition, Stagecoach offers a delivery service by a 6-tonne trailer, and the costs of this are quite reasonable. The rate is K1.25 per loaded kilometer, and 62.5t for the empty kilometer. This amounts to about 21t per tonne km. The trailer is capable of carrying a net weight of 7189 kgs. However there are a number of disadvantages of using this service:

(i) The materials procured from the suppliers have to be delivered to the regional stagecoach depot; i.e. Stagecoach will not actually collect the materials;

(ii) Deliveries are to the depots only or to districts which are on the main roads and en route;

(iii) The materials have to be collected from the depots by the DEOs and then distributed to the schools. This involves the DEOs having to look for transport to the depot and back, and further transport later to deliver the materials from the DEO's office to the schools. This option is not therefore on which is recommended for delivery on a regular basis.

(VIII) HIRING DISTRICT COUNCIL VEHICLES:

These could be hired by DEOs to make deliveries to schools. However this option is not likely to work very well, because the DEOS' current budget for hiring vehicles is very limited. These vehicles are in fact used occasionally by DEOs already. In any event, even if these were hired, this would entail delivery from the DEOs to the schools only. The separate question of how to get the materials from the suppliers to the DEOs would still have to be resolved.

Charges are: K4.00 per km for a 6-tonne lorry. Where there is a radius of 8km, the minimum charge is K20. This amounts to 67t per tonne km.

(IX) DELIVERY BY DEOS TO SCHOOLS THROUGH USE OF HIRED VEHICLES:

MANEB has a very efficient system of distribution of examination papers to schools. With respect to primary schools in particular, the practice is that they hire about four 7-tonne trucks for delivery to the DEOs. The examination papers for each school are packed and labelled by MANEB staff. These are then delivered to the DEOs. The DEOs in turn hire vehicles from PVHO, and charge MANEB for the hiring costs to deliver the examination papers. They deliver the papers to all the schools. Similarly, with educational materials, suppliers or transporters could deliver the materials to the DEOs. DEOs would be able to deliver these to all the schools more effectively and efficiently if they were then able to follow the same process that is used by MANEB . In this case, MOEC would be responsible for meeting the costs of hiring vehicles. In order for this option to work, there is a need for the establishment of a Procurement/Coordinating Unit which would place the orders with the different suppliers and arrange for them to be packed, marked for each school, and delivered to the DEOs. In addition, this would necessitate an increase in the education budget to meet the cost of hiring vehicles.

EXAMPLE OF COMPARATIVE COSTS

In order to help determine which distribution option would be more cost-effective, two of the best possible options have been selected and illustrated by comparative examples below. These options will then be compared with the existing practice followed, whereby MBS delivers to the DEOs. All calculations are approximate, and for illustrative purposes only. However the conclusions are still valid.

The options chosen are III and IX from above.

OPTION III: DELIVERY DIRECTLY TO SCHOOLS BY PRIVATE TRANSPORTERS:

Sample District:	CHITIPA
Total number of schools in District:	70
Sample item to deliver:	Exercise Books (80p)
Ideal average number of books/pupil:	4 per pupil
Weight of 100 books:	8.5 kg
Total number to deliver to all schools:	104,291
Private Transporter:	SIKU TRANSPORTERS
Distance from Blantyre to Chitipa DEO:	1001 kms.

Calculations are based on the following:

The number of exercise books to be delivered amounts to 104,291, weighing 8.8 tonnes. Siku would use their smallest vehicle, a 7-tonne truck, for easy manoevering on small and difficult roads. One 7 tonne truck carries 90,000 books weighing 7.6 tonnes. Siku's charges for delivering 90,000 exercise books up to Chitipa DEO would be about K 2,830. An additional cost of K 400 would be incurred to make deliveries of the 90,000 books to all the schools within Chitipa. The total amount of time taken up to deliver would be about 3 days. Siku's total charges for delivering 90,000 books would be about K 3230. The balance, amounting to 14,291 exercise books, would be delivered by Siku using their shuttle services. This would amount to approximately K 555.47. The final total cost for delivering 104,291 exercise books would be about K 3785.47.

OPTION IX: DELIVERY BY SUPPLIER TO DEO; DELIVERY BY DEOS TO SCHOOLS USING HIRED VEHICLES.

Sample District:	CHITIPA
Number of schools:	70
Sample item:	Exercise books (80p)
Ideal average number of books:	4 per pupil
Weight of 100 books:	8.5 kg
Total number of books:	104,291

The supplier's (Blantyre Paper Converters') charges for delivering 104291 exercise books to Chitipa DEO would amount to K 2,672.67. (The rate offered by Blantyre Paper Converters, is 30t per tonne km.)

From Chitipa DEO' office, a vehicle would have to be hired from Mzuzu PVHO (Public Vehicle Hire Organization). Most districts do have a local PVHO from where vehicles are hired. However, in Chitipa, the nearest PVHO for purposes of hiring vehicles is in MZUZU. Therefore the following calculations will also include the costs incurred of travelling to the DEO's office in Chitipa and then back to Mzuzu. It will be seen that even if a DEO were to hire a vehicle from a local PVHO, the costs would still be considerable.

Calculations are based on the following:

PVHO 7 tonne truck rates: K 1.44 per km; plus
K 171.88 fixed daily charge; plus
K 25 daily charge for driver; plus
fuel costs.

A. Distance: from Mzuzu to Chitipa DEO: 327 km.
Assumption: 2 days travel, Mzuzu - Chitipa return.
Total Cost: K 1336 plus fuel.

B. Distance: from Chitipa DEO to school furtherst south (CHAWEZEGA School): 126 kms
Assumption: 1 day travel from Chitipa DEO to Chawezega School return, covering all schools en route.
Total Cost: K 393 plus fuel.

C. Distance: from Chitipa DEO to school furtherst east (MUGHOMA School): 62 km.
Assumption: 1 day travel from Chitipa DEO to Mughoma school return, covering all schools en route.
Total Cost: K 376 plus fuel.

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D.	Distance:	from Chitipa DEO to school furtherst north (TITI school): 62 km.
	Assumption:	1 day for travel from Chitipa DEO to Titi School return, covering all schools en route.
	Total Cost:	K 376 plus fuel.

The total of A - D above amounts to K 2481 plus fuel in addition.

NOTE: The amount of K 2481 plus fuel is the cost of delivery within Chitipa only. The cost of delivery from supplier to DEO is separate. The total cost of delivery ultimately to the schools would amount to about K 5,153.67. This amounts to paying K 1,368.20 more than the cost of hiring SIKU to deliver directly to the schools.

CURRENT SYSTEM: DELIVERY BY MBS TO DEOS ONLY:

The current position is that MBS delivers most educational materials, including exercise books to DEOs. Their minimum delivery charges are 40t per tonne km.

Thus MBS' charges to deliver 104291 exercise books to Chitipa DEO would amount to K 3563.56. This excludes delivery costs from the DEO's office to the 70 schools.

From the above illustrations, it is clear that the most cost-effective method to follow for distribution purposes would be to hire private transporters to deliver directly to all the schools, as suggested in Option III. This would as already mentioned earlier, necessitate the establishment of a Procurement/Coordinating/ordering/Monitoring Unit.

SUMMARY OF CONCLUSIONS AND RECOMMENDATIONS

1. The present system of supply and distribution of educational materials is inadequate. Primary schools are not being provided with sufficient books and stationary. This affects the efficiency and quality of primary education. Substantial increase in school enrollments and lack of adequate budgetary resources for replacement of textbooks leaves many students without textbooks. Many of the primary school children receive at most only two exercise books a year. This is clearly inadequate, particularly in view of the numbers of subjects taught. Stationary is severely limited or unavailable, particularly in the infant classes.

2. Malawi Book Service is effectively the sole supplier and distributor of exercise books and stationary to primary schools. Their costs are high and their distribution services inadequate. They deliver textbooks to the REOs, and exercise books and stationary to the DEOs. This system is unsatisfactory. Firstly, neither the DEOs nor the REOs have adequate storage facilities, and deliveries cause space problems in offices and corridors. Secondly, deliveries by MBS are erratic and therefore do not allow for proper planning for distribution to schools. Thirdly, transport difficulties for both REOs and DEOs results in late deliveries to schools, or the materials not being delivered at all. The majority of headmasters who end up collecting the materials themselves lack any proper means of transport.

3. Poor planning, combined with transport difficulties results in long delays before the schools get the materials. Most schools begin planning their requirements of needs only in October, after school has already started. This results in the materials being distributed to them at the earliest, about three months later. Improper use and maintenance of books reduces the life of the books and these are already in chronically short supply. Inadequate storage conditions cause further damage to the materials. Lack of proper monitoring and record-keeping systems at all levels results in unequal distribution to schools, and sometimes in pupils not getting the materials at all.

In view of the above, the following recommendations are made:

4. That headmasters undergo training in management and record-keeping skills to ensure that there is proper and advance planing of school needs, and to improve the efficiency of the system. A system of regular reviews should in addition be established to make sure that the materials in the schools actually reach the pupils. This could be done by inspectors.

5. That REOs play no role in the distribution process. REOs lack distribution expertise and resources, and the textbooks delivered to them lie in their offices for some time until transport is made available to deliver them to the DEOs. The textbooks should therefore be delivered together with the exercise books and stationary, preferably directly to the schools.

6. That the supply of materials be tendered for competitive bidding, and therefore MBS would no longer have a monopoly of supplying and distributing the materials. This would be more cost-effective and could result in considerable savings being made by Government. The amounts saved could be used to procure more materials.

7. There should be regular reviews of the suppliers' prices to ensure that they are consistent with prevailing prices on the market.

8. That the problem of storage in schools and DEOs be urgently addressed and attended to. Future designs of schools could include proper storage facilities, and ongoing projects could include the building of store-rooms in schools in their programme. IDA and ADF should continue with their support of building storage areas in classes and schools.

9. That a Procurement/Coordinating Unit consisting of about 3 persons be established to plan, coordinate and manage the whole distribution system.

10. That monitoring of schools be carried out by more inspectors with emphasis on the management and distribution of resources in schools. The number of inspectors should therefore be increased so that all the schools are adequately covered. In addition transport should be provided to the Inspectors. In line with this, schools should be given guidelines to follow on inventory-keeping, storage, maintenance of books, distribution and general management of educational materials and there should be regular meetings to ensure that headmasters are applying the guidelines.

11. That for distribution, consideration be given to:

    (a) hiring private transporters to deliver materials directly to the schools. This would necessitate the setting up of a Procurement/Coordinating unit in MOEC to oversee and manage the whole operation; or,

    (b) providing MBS with more vehicles on a lease/purchase basis to deliver materials directly to the schools. Transport prices should be controlled by government to ensure that MBS charge competitive rates; or

(c) arranging for suppliers to deliver to the DEOs, and providing the schools with bicycles and trailer to enable them to collect the materials from the DEOs; and,

(d) using the Post Office for small deliveries; and,

(e) using Stagecoach and District Councils vehicles for occasional deliveries.

(a) SCHOOLS AFFECTED BY SUPPLY AND DISTRIBUTION PROBLEMS

PROBLEMS	NUMBERS OF SCHOOLS AFFECTED (out of total sample of 33 schools)
1. Inadequate Planning for School materials	all
2. Delays experienced in receiving materials	16
3. Inadequate Storage facilities	22
4. Materials collected using own transport	19 always collect, while 9 sometimes collect.
5. Materials delivered by DEOS	5 always deliver, while 9 sometimes deliver.
6. Inadequate* Text books	19
7. Inadequate Teachers' guides	18
8. Inadequate Exercise books	12
9. Inadequate Chalk	11

* "Inadequate" here means three or more pupils sharing a textbook

(b) CURRENT SCHEDULE FOR PROCUREMENT OF PRIMARY SCHOOL EDUCATIONAL MATERIALS

Start of School Year	October
Requests of school needs sent to DEOs by schools	OCTOBER
Orders sent to MOEC by DEOs	EARLY NOVEMBER
Orders placed with MBS	LATE NOVEMBER
Materials delivered to DEOs	COULD BE ANY TIME FROM DECEMBER TO THE END OF YEAR
Materials received by Schools	ANY TIME FROM DECEMBER TO END OF SCHOOL YEAR

(c) **PROPOSED SCHEDULE FOR PROCUREMENT OF PRIMARY SCHOOL EDUCATIONAL MATERIALS**

Start of School Year	October
Requests of school needs sent to DEOs by schools	April (of previous year)
Orders sent to MOEC by DEOs	Late April
Orders placed with suppliers	May
Materials received by schools	September

(d) **CURRENT INSTITUTIONAL FRAMEWORK FOR PROVISION OF EDUCATIONAL MATERIALS:**

INSTITUTION	ROLE
MOEC	Has ultimate responsibility for provision of educational materials and specific responsibility for allocating Budget, placing orders and policy making
MIE	Prepares, designs and produces textbooks and teachers' guides. Sets curricula. By 1992 MIE will have strengthened its capacity to print and publish all teachers' guides.
MBS	To service, assist and promote the education system by acting as central suppliers of educational materials to schools and other educational establishments in Malawi.
Blantyre Print & Packaging	Print textbooks, teachers' guides and manufactures exercise books.
Dzuka	Publishes textbooks and teachers' guides.
Blantyre Chalk Makers	Manufactures chalk
Valmore Paints	Manufactures chalk and blackboard paint
REOS	Receives textbooks and distributes them to DEOs
DEOS	Receives requests from schools, determines quantities to order and places orders with MOEC. Subsequently receives and distributes all educational materials to schools
SCHOOLS	Identify school needs and subsequently receive materials and distributes to schools.

(e) CURRENT PROCEDURE FOR SUPPLY AND DISTRIBUTION OF TEXTBOOKS AND TEACHERS' GUIDES

TASK	RESPONSIBLE AGENCY
I. MANUSCRIPT DEVELOPMENT OF BOOKS	
Set syllabus, develop and produce books	MIE
Publish Books	Dzuka
Print Books	Blantyre Print & Packaging
II. BOOK DISTRIBUTION	
Determine textbooks and teachers' guides requirements	MIE
Publish and distribute to supplier	Dzuka
Supply and distribute to users	MBS

(f) FUEL & MAINTENANCE OF VEHICLES ALLOCATIONS FOR DEOS 1991/92

(FROM RECURRENT EDUCATION BUDGET)

DISTRICTS	FUEL	MAINTENANCE OF VEHICLES
CHITIPA	K 33,500	K 13,000
RUMPHI	K 30,500	K 100
KARONGA	K 27,000	K 21,000
MZIMBA	K 40,000	K 15,000
MZUZU	K 13,000	K 5,000
NKHATA BAY	K 26,000	K 1,000
KASUNGU	K 20,000	K 10,000
NKHOTAKOTA	K 14,000	K 11,000
MCHINJI	K 15,000	K 10,000
DOWA	K 14,000	K 10,000
SALIMA	K 12,000	K 10,000
LILONGWE (URBAN)	K 16,000	K 5,000
LILONGWE (RURAL)	K 17,000	K 10,000
DEDZA	K 10,000	K 2,000
NTCHISI	K 14,000	K 10,000
NTCHEU	K 20,000	K 1,000
MACHINGA	K 18,000	K 14,000
MANGOCHI	K 18,000	-
ZOMBA (URBAN)	K 11,000	-
ZOMBA (RURAL)	K 16,000	-
CHIRADZULU	K 20,000	K 10,000
BLANTYRE (URBAN)	K 17,000	K 10,000
BLANTYRE (RURAL)	K 18,000	K 10,000
THYOLO	K 12,000	K 5,000
MULANJE	K 20,000	K 20,000
MWANZA	K 16,000	K 10,000
CHIKWAWA	K 20,000	K 10,000
NSANJE	K 18,000	K 10,000

(g)

LIST OF PRIMARY SCHOOLS VISITED

CENTRAL REGION

	SCHOOLS	DISTRICTS
1.	Chilanga Primary School	Dedza
2.	Mphunzi Primary School	Dedza
3.	Kantchito Primary School	Dedza
4.	Manyani Primary School	Kasungu
5.	Kasungu Primary School	Kasungu
6.	Khuza Primary School	Kasungu
7.	Kasipa Primary School	Nkhotakota
8.	Dema Primary School	Nkhotakota
9.	Musenjere Primary School	Nkhotakota
10.	Mitundu Primary School	Lilongwe
11.	Chimutu LEA School	Lilongwe
12.	Mdzobwe Primary Schcol	Lilongwe

NORTHERN REGION

	SCHOOLS	DISTRICTS
13.	Chifukazini Primary School	Mzimba
14.	Edundu Primary School	Mzimba
15.	Thoza Primary School	Mzimba
16.	Emazwini Primary School	Mzimba
17.	Msani Primary School	Nkhata Bay
18.	Chipuzumumba Primary School	Nkhata Bay
19.	Ilengo Primary School	Chitipa
20.	Kawale Primary school	Chitipa
21.	Mpale Primary School	Chitipa

SOUTHERN REGION

SCHOOLS	DISTRICTS
22. Soche SDA Primary School	Blantyre (Urban)
23. Namalimwe Primary School	Blantyre (Urban)
24. Monkey Bay Primary School	Mangochi
25. Chimbende Primary School	Mangochi
26. Chimwala Primary School	Mangochi
27. Mphete Primary School	Mwanza
28. Tsupe Primary School	Mwanza
29. Muloza LEA Primary School	Mulanje
30. Phaloni Primary School	Mulanje
31. Mthuruwe Primary School	Mulanje
32. Mchere Primary School	Nsanje
33. Nyamithuthu Primary School	Nsanje

(h) **A. GOVERNMENT OFFICIALS INTERVIEWED**

1.	Mr. Ngaye	Planning Division	MOEC
2.	Dr. J. Bastion	Planning Division	MOEC
3.	Mr. S. Nyirenda	Planning Division	MOEC
4.	Mr. Zingano	Head of Primary Section	MOEC
5.	Mr. Mchazime	Senior Ed. Officer (Primary)	MOEC
6.	Mr. S. Mtapaonga	Chief Ass. Ed.officer (Prim.)	MOEC
7.	Mr. Ndezu	Chief Accountant	MOEC
8.	Mr. Soko	Chief Transport Officer	MOT
9.	Mr. Siwande	Senior Transport Officer	MOT
10.	Mr. Mvuya		DPMT

(i) **B. REGIONAL EDUCATION OFFICERS INTERVIEWED**

1.	Mr. A.M. Shaba	North
2.	Mr. H.M. Mkweteza	South
3.	Mr. K. Somanje	Center

(j) **C. DISTRICT EDUCATION OFFICERS INTERVIEWED**

1.	Mr. N.K. Nyirongo	Nkhata Bay (N)
2.	Mr. H.K. Gondwe	Mzimba (N)
3.	Mrs. Machili	Mzuzu (N)
4.	Mr. D.S.Y. Kumwenda	Chitipa (N)
5.	Mr. Chirwa	Blantyre (Rural) (S)
6.	Mr. Buliyani (Ass. DEO)	Blantyre (Rural) (S)
7.	Mr. Kaunjika	Blantyre (Urban) (S)
8.	Mr. Rambiki	Nsanje (S)
9.	Mr. Zibophe	Mulanje (S)
10.	Mr. Jussa	Mangochi (S)
11.	Mr. Sopo	Mwanza (S)
12.	Mr. Moyo	Lilongwe (Urban) (C)
13.	Mr. Chitedze	Lilongwe (Rural) (C)
14.	Mr. Chikafap	Kasungu (C)
15.	Mr. Noasota	Dedza (C)
16.	Mr. Mtuda (Ass. DEO)	Dedza (C)
17.	Mr. Kammadzi	Dedza (C)
18.	Mr. Chilenga	Nkhotakota (C)
19.	Mr. D. Bondwe (Ass. DEO)	Nkhotakota (C)

D. SUPPLIERS INTERVIEWED

1.	Mr. Mvula	Assistant Trade Manager	MBS, Blantyre
2.	Mr. Namale	Manager	MBS, Lilongwe
3.	Mr. Nsewa	Manager	MBS, Mzuzu
4.	Mr. Simangwa	Sales Manager	MBS, Kasungu
5.	Mr. Bunyani	Commercial Services Man.	Blantyre Print And Packaging
6.	Mr. Lombola	Manager	Blantyre Paper Converters
7.	Mr. Kalinde	Warehouse Manager	Paper & Printing Suppliers
8.	Mr. Khanganya	Marketing Manager	Dzuka
9.	Mr. Mkandawire	Managing Director	Blantyre Chalk Makers
10.	Mr. T.S. Gill	General Manager	Valmore Paints
11.	Mr. Sambani	Productions Manager	Montfort Press
12.	Mr. L. Njena	Warehouse Manager	Times Book Shop

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E. TRANSPORTERS INTERVIEWED

1.	Mr. Chanza	Ass Trade Manager	Stagecoach Malawi Ltd.
2.	Mr. Makina	Traffic Manager	Stagecoach Malawi Ltd.
3.	Mr. Suleman	Proprietor	Siku Transport
4.	Mr. Rutherford		Brown & Clapperton Ltd.
5.	Mr. Singh		Brown & Clapperton Ltd.
6.	Dr. Adiv		Dept of Trans. Econ. Chancellor College
7.	Mr. Kammloth		Malawi Commercial Transport Project
8.	Mr. Chidzero		Malawi Commercial Transport Project
9.	Mr. Makwakwa		Malawi Commercial Transport Project
10.	Mr. Kaunda	Senior Transport Officer, ADMARC.	
11.	Mr Gondwe	Exec. Off. Admin. PVHO	
12.	Mr. Hanif	Depot Manager for Central and Northern Region, SIKU.	

(m)

F. OTHERS INTERVIEWED

1.	Mr. Rushworth, Techinical Director	Lever Brothers
2.	Mr. Kuluwani	Controller of Postal Services
3.	Mr. Kulemeka	World Bank
4.	Mr. Siege (GTZ)	MIE
5.	Mr. Mtunda (UNESCO)	MIE
6.	Mr. Seath, Senior Ed. Officer	BDO (ODA)
7.	Mr. N. Ahmed, Logistics Officer	UNICEF
8.	Mr. Gondwe, Ass Project Manager	PIU -
9.	Mr. Maziya, Head of Programmes	Christian Service Committee
10.	Mr. Kanje, Ass. Exec. Sec. for Examinations, MANEB.	
11.	Mr. Mulaga, Exec. Sec. for Exams.	MANEB

(n)

DOCUMENTS CONSULTED

1. Education Statistics, Malawi 1989. MOEC.

2. Budget Document No.1: Estimates of Expenditure on Revenue Account for the Financial Year 1991/92.

3. Education Service Review MOEC Price Waterhouse.

4. "The Organizing and Staffing of MOEC", DPMT, Jan. 1991.

5. Malawi Book Service Act, Chapter 30:03, Laws of Malawi.

6. Staff Appraisal Report, Second Education Sector Credit, Nov. 1989. World Bank.

7. Staff Appraisal Report, Education Sector Credit, Feb. 1987. World Bank.

8. "Aspects of Education in Malawi": A report prepared by the British Council for BDD, Southern Africa, Oct. 1990.

9. NATCAP Education Sector Working Group Background Paper. Sep. 1989, by Shobna Chakravarti.

10. Statement of Development Policies 1987 - 1996. Malawi.

11. Survey of Financial Needs of District Education Officers in Malawi, by Mr. R. Nyirongo. USAID.

12. Programme Assistance Initial Proposal: Malawi Girls' Attainment in Basic Literacy and Education. USAID.

13. Malawi Primary School Quality Study Report. MOEC.

14. A Survey of the Distribution of Teachers' Guides in Primary Schools By D.M.C. Nyirenda and D.R. Jere, MIE.

15. Report on the National Seminar: Basic Education for All - Meeting Basic Learning Needs in Malawi. MIE.

16. Financing and Efficiency of education in Malawi, 1984. World Bank Report.

17. Education Policies for Sub-Saharan Africa: Adjustment, Revitalization and Expansion. 1987. World Bank.

18. Financing Education in Developing Countries. A World Bank Publication.

19. Education and Basic Human Needs. World Bank Staff Working Paper, No. 450.

20. Transport Performance Bulletin 1989. EP&D/OPC

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