PD-BAT-484

PROJECT PAPER FACESHEET

AGENCY FOR INTERNATIONAL DEVELOPMENT

PROJECT DATA SHEET

1. TRANSACTION CODE: A (A = Add, C = Change, D = Delete)

Amendment Number

DOCUMENT CODE: 3

2. COUNTRY/ENTITY: Malawi

3. PROJECT NUMBER: 612-0218

4. BUREAU/OFFICE: USAID/MALAWI 06

5. PROJECT TITLE (maximum 40 characters): MALAWI COMMERCIAL TRANSPORT

FILE

6. PROJECT ASSISTANCE COMPLETION DATE (PACD): MM 03 DD 31 YY 88

7. ESTIMATED DATE OF OBLIGATION (Under 'B.' below, enter 1, 2, 3, or 4)

A. Initial FY 84 B. Quarter 4 C. Final FY 85

OFFICIAL PROJECT DOCUMENT

8. COSTS ($000 OR EQUIVALENT $1 =)

A. FUNDING SOURCE	FIRST FY 84 B. FX	C. L/C	D. Total	LIFE OF PROJECT E. FX	F. L/C	G. Total
AID Appropriated Total	1980	220	2200	4700	500	5200
(Grant)	(1980)	(220)	(2200)	(4700)	(500)	(5200)
(Loan)	( )	( )	( )	( )	( )	( )
Other U.S. 1. Private Sector (U.S.)	1000		1000	1000		1000
Other U.S. 2.						
Host Country		50	50		1050	1050
Other Donor(s) FRG				1100	1050	1100
TOTALS	2980	270	3250	6700	1550	8350

9. SCHEDULE OF AID FUNDING ($000)

A. APPROPRIATION	B. PRIMARY PURPOSE CODE	C. PRIMARY TECH. CODE 1. Grant	2. Loan	D. OBLIGATIONS TO DATE 1. Grant	2. Loan	E. AMOUNT APPROVED THIS ACTION 1. Grant	2. Loan	F. LIFE OF PROJECT 1. Grant	2. Loan
(1) SDA	701	821		-0-	-	5200		5200	
(2)									
(3)									
(4)									
TOTALS						5200		5200	

10. SECONDARY TECHNICAL CODES (maximum 6 codes of 3 positions each): 840, 839

11. SECONDARY PURPOSE CODE

12. SPECIAL CONCERNS CODES (maximum 7 codes of 4 positions each)

A. Code: TRG

B. Amount: 2000

13. PROJECT PURPOSE (maximum 480 characters)

To increase Malawi's international road transportation capability and security through development of the Malawian international trucking industry.

14. SCHEDULED EVALUATIONS

Interim MM 12 YY 85 MM 12 YY 86 Final MM 02 YY 87

15. SOURCE/ORIGIN OF GOODS AND SERVICES: 000 941 Local Other (Specify)

16. AMENDMENTS/NATURE OF CHANGE PROPOSED (This is page 1 of a ____ page PP Amendment.)

17. APPROVED BY: Sheldon W. Cole

Title: AID Representative to Malawi

Date Signed: MM 08 DD 17 YY 84

18. DATE DOCUMENT RECEIVED IN AID/W, OR FOR AID/W DOCUMENTS, DATE OF DISTRIBUTION: MM DD YY

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ACRONYMS USED IN THE PP

ABA	African Businessmen Association
AFEOB	AID-Financed Export Opportunities Bulletin
BAS	Business Advisory Services
DEMATT	Development of Malawian Traders Trust
GOM	Government of Malawi
IBRD	International Bank for Reconstruction and Development
IFB	Invitations for Bid
INDEBANK	Investment and Development Bank of Malawi
L/COM	Letter of Commitment
MOF	Ministry of Finance
MOTC	Ministry of Transport and Communications
OPG	Operation Program Grant
PACT	Private Agencies Collaborating Together
PFP	Partnership for Productivity International
PIC	Project Implementation Committee
REDSO	Regional Economic Development Support Office
RFQ	Request for Quotations
RTC	Road Traffic Commission
TCA	Training Coordinator/Advisor
TTF	Training Task Force
USAID	United States Agency for International Development

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I PROJECT SUMMARY

BACKGROUND: Traditionally Malawi has relied heavily on its rail system for the transportation of its imports and exports. Malawi rail system is tied to the Mozambique rail system and the sea ports of Beira and Nacala. Rail service has been deteriorating in Mozambique over the past 5-6 years. Since 1982, insurgency activity in Mozambique has virtually shut down the Beira-Malawi rail link and, coupled with deteriorating capital equipment has greatly reduced the capacity of the Nacala line. The results have been a major increase in transportation costs for moving imports and exports, and a large back log in moving these goods. The economic implications of this transport crisis have been far reaching.

PURPOSE: The purpose of this project is to increase Malawi's international road transport capability and security through the development of the Malawian international trucking industry. Achievement of this purpose is expected to save Malawian owned foreign exchange; increase transport security for a country following an export-led growth strategy; and contribute to the growth of regional trade and autonomy within the majority-ruled nations of southern Africa.

PROJECT DESCRIPTION: The project has three major components which support the orderly growth and development of an international trucking industry. The training component addresses the technical and managerial manpower constraints which the industry faces. The training provided will be based on the industry's felt needs and interests and participation will range from the managers of large transport firms, to owner-operators, mechanics and drivers. The training methodologies will vary considerably to meet industry needs but will concentrate heavily on non-formal, on-the-job training. Training programs supported by the project will be carried out by several Malawian institutions and private sector firms. The project contains a credit component to finance expansion of the existing fleet of large international class trucks. Approximately 10 such trucks will be financed with AID project funds. A similar number are expected to be financed by other donor organizations and from private U.S. sources with EXIM Bank backing. The credit component will be managed by the Malawi Industrial Development Bank (INDEBANK) and will be provided to smaller scale-owner operators in Malawi. The third component will support the Ministry of Transport and Communications (MOTC) in its efforts to promote the growth of an efficient international transportation capacity. Project support to the MOTC includes technical assistance in transport planning and coordination the various elements of the training and credit components, training for MOTC staff, and needed commodity support.

FINANCIAL PLAN:

Summary Project Budget
($000)

	AID	Cooperating Country	Total
Training	500	300	800
Equipment	2675	2100	4775
Technical Assistance	1305	330	1635
Other Costs	720	420	1140
Total	5200	3150	8350

The project will be implemented over a four year period commencing on the date that the Project Grant Agreement is signed. The initial year (FY84) financing will be $2.2 million to permit the ordering of capital equipment and commencing training programs. A second obligation of project will be required in early 1985 in order to execute the technical assistance contracts.

The sale of trucks on credit to Malawian trucking concerns will generate local currency which will be used to support project training activities, additonal transport credits and industry support and regulatory functions of the MOTC.

CONDITONS AND COVENANTS: The Project Agreement will contain Conditions Precedents which require that the Government of Malawi and INDEBANK execute a loan agreeement for the use and repayment of project funds used for the procurement to trucks and related transport equipment. A second C.P. will require that the GOM provide AID with a description of how the Local Currency Special Account will function and for what purpose it will be used. The Project Agreement will contain the following covenants.

(a) The Government of Malawi agrees to process expenditiously the application of road service permits submitted by Malawian transporters especially those participating in the credit and training elements of the project.

(b) The Government of Malawi agrees that the issuance of road service permits and licenses shall be conducted in a manner insuring (i) equal access for all Malawian citizens and (ii) the development of competitive and efficient national capacity for international road haulage.

(c) The Government of Malawi agrees to provide adequate personnel in support of the MOTC emergency transport planning and monitoring function and for the international transport which inspection and licensing function of the Road Traffic Commissioner's Office.

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(d) The Government of Malawi agrees to provide suitable housing, office space and support staff of the Project-financed long-term technical assistance team.

(e) The Government of Malawi agrees to take responsibility for the implementation steps specified in Table 6 as MOTC, RTC or MCF responsibility, and will make all possible effort to maintain the schedule in that table.

DESIGN TEAM: The Project Paper was drafted during May-June 1984 by a team composed of the following individuals:

Peter Cook, Design Team Leader, LBI
Phillip Moeller, Training Specialist, LBI
Nigel Lewis, Transport Economist, LBI
Michael Coley, Trucking Consultant, LBI
Thomas Kaunda, Transport Officer, MOTC
John Gallagher, Transport Advisor, USAID/MOTC
Murl Baker, Projects Officer, USAID/Malawi
Lyn Dunn, Procurement Specialist, REDSO/ESA

MALAWI COMMERCIAL TRANSPORT PROJECT

I PROJECT RATIONALE AND DESCRIPTION

A. Background

Malawi is presently in a state of transportation crisis which started in 1982 and is likely to continue into the future. The crisis stems from four facts:

1. The Beira-Malawi railroad has been virtually shut down due to insurgent activity in Mozambique.

2. This railroad carried 60-65% of Malawi's imports and exports before it was shut down.

3. Malawi's economy is critically dependent on imports and exports, particularly its agricultural sector which employs 85% of the population.

4. Alternative routes for imports and exports are either much longer than the Biera line, or overloaded and also threatened by insurgent activity.

The result has been a major increase in transport costs for moving goods and a large backlog of both imports (fertilizer) and exports (agricultural crops) which have piled up, waiting to move either into or out of Malawi. Seventy percent of Malawi's imports and exports now move by road compared with 20% in 1981, and this has spotlighted major weaknesses in Malawi's relatively undeveloped international trucking industry.*

The secondary effects of this crisis have been significant and far-reaching. Malawi's export agricultural sector is being threatened with major losses due to spoilage, and lower prices when higher transport costs are deducted from world market prices. The country is facing a severe foreign exchange shortage as export earnings are blocked on one hand, and foreign exchange is needed to pay greater transport costs and finance larger inventories on the other. In addition the IBRD estimates that 3-5% out of the 15% inflation rate for the last two years is attributable to the increase in transport costs.

It appears that all segments of the population are feeling the effects, and especially the agricultural producers and marketing organizations. So far the smallholders have been protected to some extent by increased government subsidies for transportation on

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*(See Annex F1 for a detailed analysis of the transport sector.)

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fertilizer, but this policy is being phased out due to the drain on government resources. The export prices for tobacco, tea, and sugar in Malawi have been depressed with effects both on the larger estates and on smallholders.

8. GOM Response to the Crisis

The GOM has responded to the transport aspects of the crisis in a very effective manner through six principal types of actions:

1. Establishment of a National Transport Committee composed of members of public and private sectors.

2. Encouragement of more competitive transport rate setting, and greater Malawian transporter efficiency through the support of a privately-operated freight booking office and clearing house called Malawi International Transport Company (MITCO), created in late 1983. MITCO has successfully influenced international transport prices downward and made Malawian truckers more efficient by providing a backhaul market for them on international routes.

3. Development of a program of road improvements which will amount to 30% of its capital investment program over the next three years.

4. Development of a program to stimulate the Malawian international road haulage industry. This involves the setting of standards for vehicles and drivers on international routes, development of training programs for drivers and owner-operators, and the provision of credit for large trucks suitable for international routes.

5. Negotiations with neighboring states to make permits available for transport of goods by Malawi truckers and to have access to a higher share of bilateral transport business. Also channels of communications have been opened for the exchange of information on freight movements and problems that arise on the main international links.

6. Support for increases in regional trade as opposed to overseas marketing, especially for agricultural products. This has started with the marketing of maize to Zambia and Zimbabwe in 1983-84 as they experience shortages due to drought.

Additional details on the GOM response as well as other donor programs are given in Annex F1. British, German, EEC and IBRD assistance has also been targeted to the transportation problem through road construction and the provisions of road and rail equipment.

In concert with the GOM and other international donors, USAID intends to support these initiatives.

C. USAID Strategy

The 1985 CDSS for Malawi identifies a strategy for attacking three main sets of problems which are slowing development in Malawi:

1. The reduction in critical resources due to the economic stabilization program and the transportation crisis.

2. The relatively slow growth of small landholder agriculture on which Malawi must depend for future social and economic development.

3. The erosion of the per capita natural resources base due to several factors including mounting population pressures.

This strategy provides for both responses to the immediate crisis and for longer term development initiatives. The development of small landholder agriculture will be the centerpiece of this strategy, which is expected to expand significantly the present USAID funding levels. The new strategy also emphasizes an effort to increase the capacity of Malawian institutions (both public and private) to support long term development.*

The new USAID role will focus on analysis, policy dialogue, and programming, and enlist a higher level of interaction with GOM personnel as the GOM assumes a larger role in project implementation. It will also move toward sector assistance, which involves several integrated program elements acting together to stimulate private sector development.

This strategy recognizes the major constraint imposed on the agricultural sector by the present transport crisis and the inability of the existing Malawi international road transport institutions to fully respond, despite the promising initiatives described above. This has lead the USAID mission to take a broad, industry-oriented approach to project design for the proposed Commercial Transport Project.

D. Project Purpose

1. Primary Purpose:

To increase Malawi's international road transportation capability and security through development of the Malawian international trucking industry.

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*Malawi Country Development Strategy Statement 1985 USAID April 1984.inspection programs.

2. Secondary Purpose:

To provide both short and medium term support to Malawi's training institutions and to the MCTC's emergency planning and inspection programs.

To accomplish these objectives, USAID proposes to supply training, equipment and technical assistance, to both the public and the private sectors.*

E. Project Design

The design of the Malawi Commercial Transport Project incorporates the following elements:

1. Training

The training program for industry participants would consist of both on-the-job training, and classroom courses, as appropriate. This training would be provided to a wide range of participants based on interest expressed by firms and individuals. It would range from managers of large transport companies, to owner-operators, drivers and mechanics. The following program was selected to fit closely with the capabilities of existing Malawian institutions and manpower. The principal elements are:

Type of Training	Content
a. On-the-job	- management, finance and operations
	- fleet management
	- equipment maintenance systems
	- driver vehicle maintenance
b. Classroom	-transportation management program
	- transportation management seminars
	- international drivers certificate
	- mechanics training

*The assistance framework (credit for capital equipment, training and strengthened transport planning and monitoring) provided by this project is expected to be supplemented from other donor assistance to the effort. Examples of cooperating country and other donor assistance which dovetail with this project assistance is the EXIM Bank and West German financing of capital equipment (tractors and trailers).

The training component will be incorporated into several institutions, including: 1) The Development of Malawi Traders Trust (DEMATT), which is a dynamic small business development organization supported by USAID; 2) the Polytechnic, which is a more traditional but an equally innovative technical training institution; 3) equipment dealers who are well equipped for very practical training courses; and 4) transport organizations called "umbrella organizations" which are in a position to supply services to small Malawian owner-operators in the form of marketing, fleet management and training. (see Annex F4 for the detailed training program). Approximately 200 persons will be trained.

All of these elements would be supervised and supported by the Training Coordination Advisor, and would make maximum use of existing courses and institutions. Training equipment will be required as discussed below, and provision is made for support materials as well.

An additional training element will include sending an MOTC transportation officer for advanced training in the United States. A two year Master's Degree course in Transportation Planning and Economics is anticipated. Four short overseas study tours (3-4 months) will also be provided for key personnel in the Road Traffic Commissioner's office. Additional short study tours for MOTC personnel may be provided if a further requirement is identified.

2. Equipment

There are five principal types of equipment to be procured under the project. This includes motor vehicle equipment to be supplied to Malawian trucking operators, training equipment, motor vehicle inspection equipment, computer equipment and vehicles for the MOTC.

The motor vehicle equipment consists of heavy tractors (called "horses" in Malawi), trailers and spare parts. Approximately 10 complete vehicles would be acquired in the 28-32 ton capacity range. These vehicles are most suitable for efficient international haulage, and correspond to the most recent equipment purchases by well-managed transport operations. They would be acquired by the Malawi Industrial Development Bank (INDEBANK) for sale primarily to small owner-operators in Malawi (see Annexes F5 and F7 for more detail).

The training equipment is designed to complement the various aspects of the training program where existing materials are not available. The equipment includes:

a. Audio-visual aids

b. sample engine and drive train (to be acquired with the above equipment)

c. mechanical repair tools and equipment

d. course materials from published sources

e. copying machines (2 each)

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This equipment would be supplied to the Polytechnic, DEMATT, and the umbrella organizations, where the need was identified (see Annex F 4 for details).

Road vehicle inspection equipment was also identified as a project need. This equipment is required by the Road Traffic Commissioners Office of the MOTC to inspect vehicles for the proposed Certificate of International Fitness which will qualify trucks for international routes. The Equipment includes:

a. brake testers

b. headlamp testers

c. emission testers

The equipment will be selected for use by local inspectors and with minimum maintenance requirements. There will be three inspection stations equipped under the project.

Computer hardware and software is critically needed by the MOTC to aid in managing the transport response to the present crisis, and in putting the vehicle and road permit records into accessible and up-to-date condition. This will require two microcomputers equipped for data base management, word processing and spread sheet analysis. One would be installed in MOTC headquarters in Lilongwe and one in the Road Traffic Commissioner's office in Blantyre. Support for software development and maintenance is included as well.

Finally three vehicles would be provided to the MOTC for use by the three long term advisors in carrying out their duties.

3. Technical Assistance

Both technical assistance and training will be supplied to the Ministry of Transport and Communications (MOTC), which is attempting a broad scale development effort for the private Malawi-based international trucking industry. The technical assistance will consist of:

- One long-term (3 years) international transit advisor. This person would continue the present successful efforts of alleviating the international transport crisis by trucking import and export flows through the various bottlenecks in the transport system, and insure that costs are minimized. He will also assist in developing transport policy and support for the Malawi transport industry.

- One medium-term (2 years) senior transportation planning officer. This person would replace the present senior transportation planning officer while he is on overseas training.

- One long-term (3 years) training coordination advisor. This person would be responsible for the supervision of all aspects of transport industry training, to insure that these programs are adequately carried out and fit with GOM industry development strategy. He would also control short-term consultant assignments.

- 18 person-months of short-term consultant effort. This would be applied toward a variety of tasks including development of a data system for the Road Traffic Commissioner's office, designing curriculum and training materials for the various training programs, and other tasks to be defined by the long-term advisors and the MOTC.

These technical advisors will supply critical start-up support for the international trucking industry, in addition to the on-the-job training supplied to the MOTC, and longer-term support to Malawi training institutions (see Annex F and for more details and descriptions of scopes of work and the overseas training program). The Project will also finance a Malawian Assistant Manager to perform many of the administrative duties which will fall on the Project Director. These services will be acquired on a Host Country PSC

F. Overall Impact of the Project

These components are intended to increase the number of Malawians who are trained and equipped to participate in the relatively complex international transport industry. It will also increase the efficiency of transport planning and management by the MOTC through on-the-job and overseas training, improved data systems, and participation in the international transport task force by technical assistance personnel. A subsidiary benefit will be the increase in capacity and capability of several Malawi training institutions.

Medium to long-term benefits of the project are expected to accrue to the agricultural producers in Malawi; both to the estates and to the small landholders. Benefits will result from an increased availability of fertilizer in Malawi and better access to overseas markets, creating higher productivity and incomes.

Malawi will also experience increased transport security as the national road transport industry develops and replaces the transporters from neighboring countries who are presently dominating the business. The country will also save critical foreign exchange and thereby lessen a major constraint on its development programs.

The project life of AID imports is expected to be three years. It is anticipated that longer-term development activities will continue into the future, using the local currency revolving fund which is created from the sale of the large trucks to Malawian transporters. Training costs and maintenance of both computer systems and vehicle inspection equipment are also expected to be covered by disbursements from this fund.

III. COST ESTIMATE AND FINANCIAL PLAN

A. Summary Cost Estimate

The cost estimate and the overall financing plan for the project are summarized in Table 1. This shows the costs by principal components and indicates the extent of funding by USAID and by the cooperating country for each of the following components:

- Training for the road haulage industry
- Training for MOTC personnel
- Procurement of equipment and support facilities
- Technical assistance for MOTC and training institutions
- Housing, offices, support equipment etc.

The total AID contribution is $5.2 million mainly in foreign exchange, with the Government of Malawi providing $3.15 million. These totals allow for inflation and contingencies to the sum of approximately $1.14 million.

B. Cost of Major Inputs and Outputs

The cost of the principal project inputs and outputs are summarized in Table 2. This shows the estimated cost of the input as funded by AID and by the Government of Malawi respectively.

The matrix also shows estimates of the cost of project outputs for each type of input, hence indicating the relationship of project inputs to project outputs in cost terms. This quantifies certain of the expected outputs which were listed qualitatively in the logical framework.

TABLE 1

SUMMARY COST ESTIMATE AND FINANCIAL PLAN
(000 U.S. $)

	AID		GOM		TOTAL		
	FX	LC	FX	LC	FX	LC	TOTAL
1. Training Industry (i)							
a. DEMATT		38.1		100.0*		138.1	
b. Polytechnic	-	125.1	-	200.0*	-	325.1	
c. Umbrella org. training	-	43.2	-	-	-	43.2	
d. Support packages, equipment etc.	162.1	30.0	-	-	162.1	30.0	
Sub-Total	162.1	236.4	-	300.0	162.1	536.4	698.5
Training MOTC (ii)							
a. Study for Masters degree	40.0	-	-	-	40.0	-	
b. Study tours	60.0	-	-	-	60.0	-	
Sub-Total	100.0	-	-	-	100.0	-	100.0
2. Equipment							
a. Tractor, trailers & spares	2500.0	-	2100.0**	-	4600.0	-	
b. Vehicle inspection equipment	50.0	-	-	-	50.0	-	
c. Vehicle for MOTC & operating costs	40.0	36.0	-	-	40.0	36.0	
d. Computer Facilities	30	19.0	-	-	30.0	19.0	
Sub-Total	2620.0	55.0	2100.0	-	4720.0	55.0	4775.0
3. Technical Assistance							
a. MOTC advisors (2)	600.0	-	-	-	600.0	-	
b. Training Coordinator(1)	360.0	-	-	-	360.0	-	
c. Short term consultants	270.0	-	-	-	270.0	-	
d. Project Management Assistance	-	75.0	-	-		75.0	
Sub-Total	1230.0	75.0	-	-	1230.0	-	1305.0
4. Housing, offices, support equipment & staff	-	-	-	330.0*	-	330.0	330.0
5. Total	4112.1	366.4	2100.0	630.0	6212.1	996.4	7208.5
Inflation	173.3	89.8	-	153.9	173.3	243.7	417.0
Sub-total	4285.4	456.2	2100.0	783.9	6385.4	1240.1	7625.5
Contingencies	414.6	43.8	200.0	66.1	614.6	109.9	724.5
6. Grand Total	4700.0	500.0	2300.0	850.0	7000.0	1350.0	8350.0

*In kind

**Trucks supplied by the GOM through INDEBANK under West German financing

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Notes for Table 1:

1. (i) Training-Industry (see Table F4-1 for AID components). Includes additional $30,000 for miscellaneous supplies. GOM component of $300,000 includes training facilities, equipment and staff costs at Polytechnic and DEMATT.

   (ii) Training-MOTC - Includes provision for two-year master's degree program for one person, and study tours for four persons of approximately four months each (includes travel and per diem allowance). Additional training needs may be identified.

2. Equipment

   a. USAID contribution of $2.5 million is for the purchase of approximately 10-15 tractors and trailers (or combination) and spares. $2.1 million represents Malawain and other donor credits made available to finance additional trucks. EXIMBANK expects to make a sizeable loan for procuring trucks for Press Transport Limited. The GOM assures backing of this loan. The West German government expects to make a similar amount of credit available for West German-manufactured transport equipment. Both of these capital investments will be made within the framework established by this project.

      GOM contribution of $1.8 million is in loan guarantees for Press Transport Limited for 15 vehicles to be purchased under EXIMBANK loan.

   b. Vehicle inspection equipment is for the Road Traffic Commissioner's Office.

   c. Passenger vehicles for MOTC include two (2) compact and one (1) subcompact vehicles (estimated at $14,000, and $12,000 each, duty free) with operating costs of $333 per vehicle per month.

   d. Computer facilities - Consists of two micro-computers valued at $12,500 each, plus additional peripherals and software valued at $5,000, and $10,000 included for data base development services. A maintenance contract is included at $1,500 per unit per annum.

3. Technical Assistance - includes 60 person-months for MOTC advisors, 36 person-months for the Training Coordinator and 18 person-months for short-term consultants.

4. Housing, offices, office equipment, etc., is to be provided by GOM.

TABLE 2

COSTING OF PROJECT OUTPUTS/INPUTS
(000 U.S.$)

Project Inputs	Total Costs	PROJECT OUTPUTS Trained Trans-porters	Trucks on the road	Improved Vehicle Inspection	Improved MOTC Planning
a. Training Contracts	336	236	0	60	40
b. Equipment	2837	176	2500	60	101
c. Technical Assistance	1305	570	0	60	675
GOM					
a. Equipment	2100		2100		
b. Housing, offices etc.	630	300		30	300
Total	7208	1282	4600	210	1116

C. Financial Plan

The general financial plan for the project is as follows:

1. AID funds will be used for major foreign currency costs such as equipment purchases and technical assistance.

2. AID will also fund the start-up costs of training activities in the first year, and certain maintenance and program development costs in the following years, especially where foreign currency expenditures are involved.

3. The MOTC will provide the local currency costs of office space, secretarial support, and housing required for the long-term technical assistance.

4. GOM institutions (Polytechnic and DEMATT) will provide training staff and facility support throughout the project.

5. The GOM will provide additional (West German-financed) international transport vehicles and make its best endeavors to support loans for similar vehicles ordered by the private sector under international financing.

The financing of the heavy transport equipment will involve a two step process. Grant funds will be provided to the GOM (Treasury) which will designate MOTC as the Principal Secretary and Controlling Officer. The GOM will then lend the funds to INDEBANK at an interest rate of approximately 8% INDEBANK will onlend the funds to individual transport operators, who pass the screening tests as jointly agreed by MOTC, INDEBANK and USAID (see Annex F5).* INDEBANK will purchase the vehicles on a duty-free basis, but price them to the buyer at a cost which is competitive with prevailing market prices, including duty. The loan repayment (including the portion for duties) will be placed in a Special Account of local currency controlled by the MOTC.

INDEBANK will charge a normal commercial interest rate of approximately 15% to the individual transport operators. Out of the interest spread of approximately 7%, 2% will be allocated for administration of the project funds and 5% for risk coverage. The 5% will be deposited in a special fund which will cover loan defaults when they arise. The unused part of this fund will revert to a Special Account of local currency funds, which is the same account in which loan repayments to the GOM will be deposited by INDEBANK, along with the 7% interest.

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*INDEBANK was selected as the clear choice among Malawi credit institutions for its designated role in industrial development and for its technical competence (see the evaluation of INDEBANK in AID Evaluation Special Study No. 11, March 1983).

Disbursement from the Special Account will be controlled by the MOTC with USAID and MOF concurrence. A disbursement schedule will be proposed at the beginning of each year by the MOTC and submitted for USAID and MOF approval prior to any disbursements. These disbursements will be designated in priority for:

1. Project local currency expenses such as training and training materials and training facilities.
2. Maintenance costs of project-supplied non-capital equipment.
3. Revolving loan funds for additional trucks, as needed.
4. Other uses in support of the international trucking industry or the transport sector in Malawi.

Projected use of the local currency funds over the three year project life is shown in Table 3. There are no disbursements in the first year since the initial loan payments will not be accumulated until the second year.

All expenditures during the project are given by year of obligation in Table 4. This shows the breakdown of AID disbursements (in foreign and local currencies) during the three fiscal years starting in FY 1985. The following points should be noted:

1. Training

The funding of training support via DEMATT, the Polytechnic, and the various umbrella organizations is a local currency cost. The provision of training equipment and support facilities is a foreign currency cost. Provisions have been made for overseas training for one person full time (2 year master's degree) and for separate study tours for four persons (approximately 4 months duration each).

2. Equipment

The sum of $2.5 million is allowed for the purchase of approximately 10-15 tractor-trailers, or combinations thereof, and associated spare parts. Allowance is also made for vehicle inspection equipment and for three support vehicles (sedan type) for the MOTC and associated operating costs. The cost estimate also provides for the purchase of two micro-computers for the MOTC, including hardware, appropriate software and allowance for continuous maintenance of the systems.

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TABLE 3

PROJECTED LOCAL CURRENCY FUND USES

(000 US$)

	Training Support	Equipment Maintenance	Revolving Loans	Other Uses	Total *
FY1985	-	-	-	-	-
FY1986	70.4	15.0	315.0	49.6	450.0
FY1987	88.3	15.0	240.0	51.7	395.0
FY1988	90.0	16.0	180.0	54.0	340.0
FY1989	100.0	16.0	130.0	54.0	290.0
FY1990	110.0	17.0	55.0	53.0	235.0
FY1991	100.0	17.0	-	58.0	185.0
FY1992	100.0	18.0	-	22.0	140.0
FY1993	82.0	18.0	-	-	100.0
FY1994	40.0	20.0	-	-	60.0
FY1995	-	20.0	-	-	20.0
TOTAL	780.7	172.0	915.0	342.3	2,215.0

*18% of outstanding loans (25% -27% fee for risk coverage subtracted from loan total each year) for conservative estimate.

TABLE 4

PROJECTION OF AID EXPENDITURES
(000 US$)

	1984/5		1985/6		1986/7		TOTAL	
	FX	LC	FX	LC	FX	LC	FX	LC
1. (i) Training (industry)								
a. DEPATT	-	16.1	-	11.0	-	11.0	-	38.1
b. Polytechnic	-	37.2	-	35.0	-	52.9	-	125.1
c. Umbrella org. training	-	14.4	-	14.4	-	14.4	-	43.2
d. Support packages, equipment etc.	162.1	10.0	-	10.0	-	10.0	162.1	30.0
	162.1	77.7	-	70.4	-	88.3	162.1	236.4
(ii) Training (MOTC)								
a. Study for Masters degree	20.0	-	20.0	-	-	-	40.0	-
b. Study tours	30.0	-	30.0	-	-	-	60.0	-
2. Equipment								
a. Tractors, trailers & spares	2500.0	-	-	-	-	-	2500.0	-
b. Vehicle inspection equipment	50.0	-	-	-	-	-	50.0	-
c. Vehicle for MOTC & operation costs	40.0	12.0	-	12.0	-	12.0	40.0	36.0
d. Computer facilities	30.0	13.0	-	3.0	-	3.0	30.0	19.0
	2620.0	25.0	-	15.0	-	15.0	2620.0	55.0
3. Technical Assistance								
a. MOTC advisors	120.0	-	240.0	-	240.0	-	600.0	-
b. Polytechnic advisors	120.0	-	120.0	-	120.0	-	360.0	-
c. Short term consultants	105.0	-	105.0	-	60.0	-	270.0	-
d. Administrative Assistant	-	25.0	-	25.0	-	25.0	-	75.0
	350.0	25.0	465.0	25.0	420.0	25.0	1230.0	75.0
Total	3177.1	127.7	515.0	110.4	420.0	128.3	4112.1	366.4
Inflation (FX 5% p.a.	79.4	9.6	39.3	26.1	54.6	54.1	173.3	89.8
(LC 15% p.a.								
Sub Total	3256.5	137.3	554.3	136.5	474.6	182.4	4285.4	456.2
Contingencies							414.6	43.8
GRAND TOTAL							4700.0	500.0
							$5,200,000	

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3. Technical Assistance

Costs have been estimated for the following technical assistance:

- one MOTC Senior Advisor- continuous for 3 years
- one Training Coordinator/Advisor- continuous for 3 years
- one MOTC Senior Transport Officer- continuous for 2 years
- short-term consultants - 18 person-months
- one Administrative Assistant (local hire)

4. Miscellaneous

Costs have been escalated assuming inflation at 5% per annum on foreign currency and 15% per annum on local currency. Overall contingency of approximately 10% has been allowed.

D. Projection of Expenditures by Fiscal Year

Finally the overall projection of expenditure by fiscal year of obligation is given in Table 5. This summarizes the total AID and GOM contribution in each fiscal year showing allowances for inflation and contingencies.

TABLE 5

Projection of Expenditure by Fiscal Year

(000 US Dollars)

FISCAL YEAR	A.I.D.	G.O.M.	TOTAL
1984/85	3304.8 89.0	2310.0 15.8*	5719.6
1985/86	625.4 65.4	210.0 49.6*	950.4
1986/87	548.3 108.7	210.0 88.5*	955.5
Total	4741.6	2883.9	7625.5
Contingencies	458.4	266.1	724.5
GRAND TOTAL	5200.0	3150.0	$ 8350.0

* Inflation

III. IMPLEMENTATION PLAN

A. Priority of the Project Components

The Project components respond to immediate, short-term and medium-term needs. Therefore special emphasis will be placed on certain aspects of the project to make certain that the immediate needs are addressed first.

Immediate needs are considered to be:

1. International Driver Training Course and Testing
2. International Trucking Management Training Short Course
3. Heavy Truck Procurement
4. Computer Procurement
5. MOTC Technical Assistance (2 key persons)

Short Term needs are considered to be:

1. All other training elements for trucking industry
2. Vehicle certification and inspection program

Medium long term needs are:

1. MOTC training and remaining technical assistance
2. Training and Technical Assistance to training institutions
3. Development of support monitoring and maintenance programs

Project implementation will strive to meet these needs according to the above priorities.

B. Implementation Sequence and Responsibilities

The implementation process is outlined in the responsibility chart shown in Table 6. The implementation has been divided into six components roughly related to time sequence but grouped by function. Some steps will run in parallel as indicated by the timing.

TABLE 6

IMPLEMENTATION SEQUENCE AND RESPONSIBILITIES

TIMING	STEP	RESPONSIBILITY
	A. MOBILIZATION	
Upon Project Approval (A) (could start in June)	1. Nomination of Project Director and formation of a Project Implementation Committee	MOTC
A to A+ 1 mo (could start in June)	2. Formation of Training Task Force (TTF)	MOTC
	3. Hold first implementation workshop on immediate training and procurement	MOTC & REDSO
A to A + 3 mo	4. Start Procurement Process for	
	a) Technical Assistance and DEMATT Screening	USAID/Malawi
	b) Local Training Contracts	MOTC & TTF
(could start in July)	c) Transport Equipment (IFB and request for candidate suppliers)	USAID/Malawi & REDSO & INDEBANK & MOTC
	d) Computer Equipment	MOTC & USAID
A to A & 3 mo	5. Design of short courses and International Drivers Certificate	Polytechnic & DEMATT
A to A + 3 mo	6. Allocate and Prepare Office Spare and Housing for Technical Assistant	MOTC & RTC
A to A + 1 mo	7. Prepare Agreement Between INDEBANK and MOF	MOF & INDEBANK
	B. START T.A. AND 1ST PHASE TRAINING	
A + 1 mo	8. Sign Contract with MOTC Technical Advisor and Computer Supplier	USAID & MOTC
A + 3 to A + 4 mo	9. Sign Contract with Consulting Firm for Technical Assistance and Mobilize Training Coordinator (TCA)	USAID & MOTC

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Table 6 cont.

A + 4 to A + 5 mo	10.	Hold second implementation workshop and create First Year Training Work Plan	MOTC & TTF
A + 5 mo	11.	Sign Contracts with Training Organizations and Start Design of courses in short term program	MOTC + TCA
A + 4 mo	12.	Commence short course training and Driver's Certificate	Polytechnic + DEMATT
		C. OBTAIN TRUCKS	
A to A + 1 (could start in July)	13.	Advertise for Transport Candidates	MOTC
A + 2 to A + 3 mo	14.	Screen Candidates for Equipment Loans	INDEBANK & DEMATT
A + 3 mo	15.	Determine Equipment Needs and release IFB	INDEBANK & DEMATT
A + 4 mo	16.	Evaluate Bids and award Contract to Supplier	INDEBANK & MOTC
a + 6 to A + 7 mo	17.	Arrival of Trucks in Malawi	Supplier
		D. 2ND PHASE OF TRAINING	
A + 4 mo	18.	Start Monitoring of Training	DEMATT & TCA
A + 7 mo	19.	First Trainers Ready for Operations	Polytechnic & DEMATT
A + 8 mo	20.	Start up of Short-Term Training Courses	Polytechnic & DEMATT
		E. VEHICLE INSPECTION	
A + 9 mo	21.	Determine Vehicle Inspection Equipment Needs and Order Equipment	TCA & RTC
A+9 to A+12 mo	22.	Organize Vehicle Inspection Services and Inspector Training Program	RTC & TCA

Table 5 cont.

	F. EVALUATION AND ON-GOING PROGRAMS	
A + 12 mo A + 24 mo A + 36 mo	23. Evaluation Workshop and Design of Next Year Work Plan Including:	MOTC & PIC
	a) Design of Training Programs b) Re-evaluation of Technical Assistance Needs	TTF MOTC
A + 22 mo	24. Outside Evaluation	USAID

The first step in the mobilization of the project will be the appointment of a Project Director by the MOTC, and hiring an administrative assistant locally to assist in project management. The Project Director will head a Project Implementation Committee (PIC) composed of GOH personnel and representatives of the other organizations involved in the project. It is expected that the committee will include the following:

MOTC Project Manager
MOF Liaison
OPC Liaison
MOTC Planning Department Representative
MOTC Road Traffic Commissioner
Polytechnic Representative
DEMATT Representative
INDEBANK Representative
Training Coordinator/Advisor

This committee will make all major policy decisions regarding the implementation of the project and will make annual recommendations concerning the disbursement of project funds. It is recommended that an two implementation workshops be organized to work out the roles of each member of the committee and their organizations for project implementation. A first implementation workshop will be held as soon as the project is approved, in order to start up the immediate program steps described above. The workshop would involve a training mobilization specialist and a contracting specialist supplied by USAID or REDSO.

The second step in mobilization will be the formation of a training committee or task force which will manage the implementation of the training aspects of the project. This committee will be concerned with the management monitoring and coordination of all the organizations involved in the transport industry training. This would include:

MOTC Representative
Polytechnic Representative
DEMATT Representative
Training Coordinator/Advisor (TCA)
Ex-officio members could include umbrella organizations or other interested groups.

The TCA would serve as the operational aim of the training committee for day-to-day coordination.

Another step in mobilization is to start the procurement process for (1) Technical Assistance (2) Local Training (DEMATT and Polytechnic) (3) Transport Equipment and (4) Computer Equipment and Programming (see Procurement Plan below). This will involve several organization responsibilities as shown in Table 6. USAID will take the lead where AID direct contracting is proposed, while MOTC will take the lead under host country contracting, with USAID support, where necessary. The transport equipment Invitation for Bids (IFB) will be prepared by INDEBANK with AID/Washington and/or REDSO/ESA support.

At this point the MOTC will also start planning for technical assistance and the MOF will be drawing up a loan agreement with INDEBANK. This agreement will be approved by USAID prior to disbursement of funds.

The second component of implementation centers on the training program and contracting for technical assistance. The first advisor can be contracted immediately after project approval (see procurement). The contracting efforts for the remaining technical assistance would normally take 3-4 months to complete (This can be shortened by two months if AID packages the RFP prior to project approval).

The major MOTC responsibilities will be to organize the second implementation workshop (with USAID assistance) as soon as the TCA is available. This workshop would focus on organizing the short to medium term training program.

As soon as the work plan has been drafted for the first year, training contracts can be signed between MOTC and the Polytechnic and DEMATT. The immediate training programs can start in month 4 if planning and course design were started right after project approval or before. These will be coordinated by the TCA with the creation, of an international heavy goods drivers certificate recognized by the Road Traffic Commissioner's Office.

The next component of implementation concerns processing transport vehicle credit applications and screening of applicants. This can start one month after project approval, as soon as a screening contract has been negotiated with DEMATT. The screening will start with a list of candidates obtained by the MOTC through a limited advertising effort, which will take place upon project approval (Actually most Malawian international transporters are presently aware of the program, as a result of the DEMATT/Polytechnic and INDEBANK surveys). INDEBANK will be responsible for conducting screening with DEMATT assistance for the management and training aspects. Final selection will be made by a committee chaired by the MOTC Project Director and including INDEBANK, DEMATT and a USAID representative.

Once the candidates have been selected an equipment list and technical specifications will be prepared. This should be the only remaining section of the IFB. Once the IFB has been completed it may be released immediately. Notice of the proposed procurement and availability of the IFB will be published in the Commerce Business Daily and the AID Financed Export Opportunities Bulletin (AFEOB). The notice will be submitted to the AID Office of Small Business by cable sufficiently in advance (60 days) of the closing date of the IFB. INDEBANK will have copies of the IFB available for distribution to

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interested firms either directly or from AID/W SER/COM/ALI. One month is provided for receipt of bids, and the evaluation can be done within 1-2 days (see Annex F7 for the proposed evaluation procedure). A contract can then be awarded to the successful supplier by INDEBANK within 4-5 days. INDEBANK/MOTC will request USAID through RFMC/Nairobi to open a Direct Letter of Commitment (L/COM) to the successful supplier. Assuming a 2-3 month supply time, the trucks will arrive in 6-7 months from project approval.

At the same time as the IFB for equipment is released, the candidate truckers will begin to undergo an intensive training course to cover all areas that appeared to be deficient in the initial screening (see Annex F4 for additional details on training implementation). Training courses will also start up for other trucking industry personnel who have shown interest in the training program. A wide variety of training will be conducted by DEMATT, the Polytechnic, and umbrella organizations under coordination by the TCA.

The next element of the project implementation will be development of an improved vehicle inspection program in the Road Traffic Commissioner's Office. This program will be developed by the Road Traffic Commissioner with the aid of the TCA. Equipment lists will be specified for vehicle inspection at this time, and the equipment procured in months 9-12. At the same time a vehicle inspector training program will be designed and carried out with the aid of the TCA.

Finally there will be an evaluation workshop at the end of the first project year to assess the degree of success and efficiency of the project implementation. Recommendations of improve the process will then be incorporated into the work plan for the second year. This workshop and evaluation will be scheduled for each year of the project.

C. Procurement Plan

Due to the variety of items to be procured under this project, the following Procurement Plan has been designed with REDSO/ESA assistance.

1. Introduction

The source and origin of grant financed procurement will be AID Geographic code 941 except for those commodities exempted as indigenous or shelf items purchased under approved local currency procurement, and lightweight project vehicles covered by East and Southern Africa's Blanket Procurement Waiver. Office supplies are to be locally procured. Note that the extended shelf item procurement rule encompasses both Malawi and several of its neighboring countries.

A procurement lead time of 6 to 7 months can be expected for U.S. origin and source equipment, from time of issuance of a PIO/C and/or an IFB. Therefore PIO/Cs for U.S. source commodities will be issued in the first project month following signing of the Project Grant Agreement. Local purchasing of lightweight vehicles and supplies will require a few days to a few weeks depending on the type of items procured and its availability locally.

All U.S. source and origin commodities will be shipped C.I.F. Blantyre, Malawi. Suppliers will be requested to provide all risk marine insurance in the amount of 120% of the C.I.F. value of the commodities and similar insurance for inland freight.

All AID-financed equipment and materials and their shipping containers must be suitably marked and identified with the standard AID emblem to identify them as U.S. foreign assistance. Suppliers must be instructed in this regard and be required to properly mark/affix emblems to all items supplied. It is the responsibility of the MOTC to purchase emblems and properly enforce marking requirements for all locally purchased items. Information regarding the availability of AID emblems may be obtained form either the AID Office of Commodity Management in Washington or from the Regional Supply Officer, REDSO/ESA.

It is the responsibility of the MOTC to initiate documentation required for customs clearance prior to arrival of goods in port and to assure that such documentation is made available to the freight forwarder to permit goods to be moved from port of entry promptly upon arrival.

It is the responsibility of the respective procurement entities to inspect goods upon arrival and to report to the MOTC Project Director and USAID/Malawi as soon as possible thereafter any shortages or damages so that a viable insurance claim can be initiated.

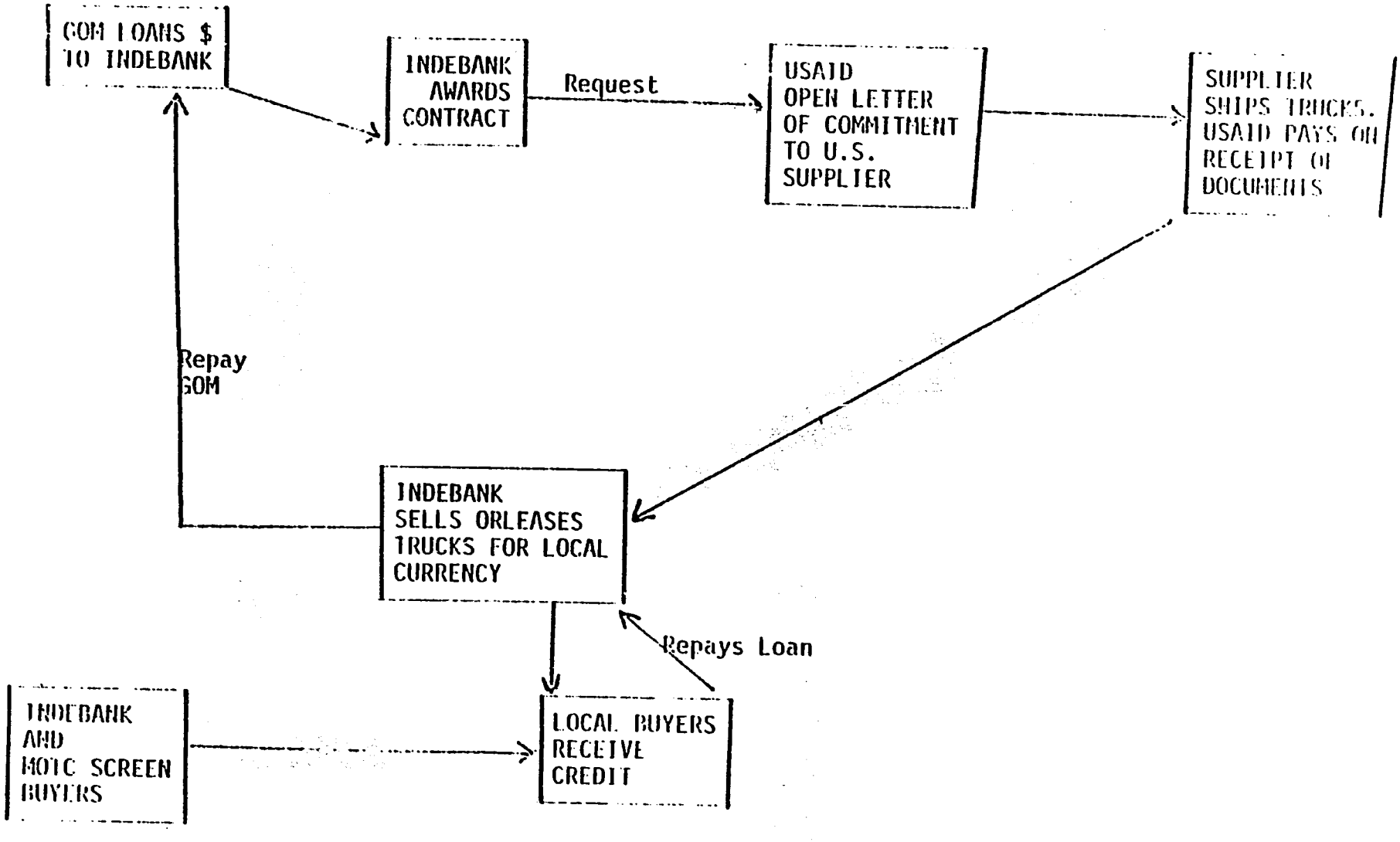
Tractor-trailer equipment will be titled to either individual Malawians, or to INDEBANK in the case that a hire-purchase or leasing arrangement is used. All other commodities will be titled to the MOTC.

2. <u>Tractor-Trailer Equipment Procurement</u>

Approximately 15 tractor-trailer combinations will be procured using formal competitive bidding procedures. A single Invitation for Bids (IFB) will be issued by INDEBANK on behalf of the 10 - 15 individual Malawian truckers who compose the buyers group. These buyers will have been processed and have loans approved prior to the release of the IFB. The bid evaluation process will take into account service and maintenance capability as well as cost (see Annex F7 for a proposed evaluation system). Procurement will follow procedures as described in the AID Handbook 1, Supplement B, Chapter 19 applicable to the procurement of goods and services with AID funds made available to an

FIGURE 1

TRANSPORT EQUIPMENT PROCUREMENT PROCESS



intermediate credit institution. Certain procurement policies described in AID Handbook 11, Chapter 3 are applicable regarding formal procurement procedures, advertising, cargo preference, etc. A diagram of the procurement process is shown in Figure 1.

The following steps are required:

a. MOTC solicits expressions of interest from potential truck buyers.

b. Applicants sent to INDEBANK and DEMATT for final screening/processing.

c. DEMATT prepares portfolios for each applicant to present to INDEBANK board, following the criteria outlined in Annex F5.

d. INDEBANK selects final 10-15 qualified applicants which form the buyers group.

e. MOTC/INDEBANK/AID prepares IFB. Specifications contained in IFB must be nonrestrictive with relation to brand/make of vehicle. However, IFB should very carefully outline the support services/maintenance/training facilities, etc. which bidder must be able to provide (see Annex F7).

f. Availability of IFB must be advertised in the CBD and AFEOB via AID Office of Small Business well in advance of issuance.

g. Tender review board should be selected and consist of MOTC, INDEBANK and other appropriate parties to review bids and award contract. Bid evaluation should follow procedures outlined in section 3.5.7 of AID Handbook 11, Chapter 3.

h. MOTC/INDEBANK requests USAID through RFMC/Nairobi to open an AID Direct Letter of Commitment (L/COM) to the successful U.S. Supplier.

Note: (1) The IFB should request that goods be delivered CIF, allowing the U.S. supplier to arrange U.S. Transport. Clause should stipulate that ocean transport be on privately owned U.S. flag commercial vessel.

(2) The event that INDEBANK cannot find 10-15 individual qualified applicants, the procurement will be done in two tranches.

3. Computer Equipment

Procurement will be the responsibility of the MOTC, assisted by USAID/Malawi Project Director in the preparation of necessary AID procurement documents, i.e. PIO/C.

This equipment will be procured on a sole source basis from BURCO Electronic Systems Limited (see Annex F7 for a detailed equipment list). The justification for this type of procurement is that:

a. The GOM has standardized its computer acquisition on the Burroughs B20 series.

b. The MOTC has already acquired a data management program designed for the project that is written for a Burroughs B20 (or B25) computer.

c. BURCO is the only Burroughs dealer in Malawi in the service and maintenance capability. Fast service and maintenance are considered crucial to the performance of this equipment.

These reasons support the special design and operational requirement for sole source contracting given in AID HDB 11 Chapter 3, Section 2.2.5(b), (see Annex F13 for Waiver Text).

This equipment will be acquired through a host country contract between the MOTC and BURCO. The procurement process will start immediately upon project approval as indicated in the implementation plan. MOTC may request REDSO assistance through USAID in contract preparation and negotiation. However a firm price quotation has been received as shown in Annex F7.

4. Vehicle Testing Equipment

Before procurement can proceed this equipment will require the development of more detailed technical specifications. Exact requirements will be determined once implementation begins. It is expected that detailed specifications will be developed by the TCA in conjunction with the RTC in month 9 from project approval. At this time it is anticipated that most equipment will be procured by the TA Contractor through informal solicitation of a reasonable number of sources as provided for in Handbook 11, Chapter 3, Section 2.2.4.

It is the responsibility of the selected TA Consultant to purchase the equipment of behalf of MOTC for a fixed procurement fee, to be negotiated in the TA contract. Direct payment by USAID for commodities purchased will be made to the TA firm against submission of payment documents and evidence of shipment. In this manner the TA firm will be reimbursed for all purchases of commodities and commodity related services.

5. Vehicles for MOTC

Three project passenger vehicles will be required for MOTC. These will be procured from a local dealer having service and maintenance available in Malawi. Since this contract will be under $100,000 it is anticipated that informal price quotations will be solicited from dealers in Malawi, and perhaps Zimbabwe. The offeror with the most advantageous offer will be selected per AID Handbook 11, Chapter 3, Section 2.2.4. Authority to procure lightweight vehicles locally is obtained under the Blanket Vehicle Waiver for East and Southern Africa, which includes Malawi.

The description of suitable vehicles meeting MOTC criteria is given in Annex F7. MOTC will conduct its own procurement on the basis of a PIO/C prepared by MOTC and the USAID/Malawi Project Officer. Award will be subject to USAID Project Officer approval. Payment may be effected through direct AID payment to the supplier against standard payment documents.

6. Other Low Cost Equipment and Materials

This equipment and materials will be procured on an extended shelf basis with USAID reimbursement of costs.

7. Technical Assistance

The procurement of technical assistance is divided into two parts:

a. A personal service contract for the Senior MOTC Advisor

b. A contract with a U.S. consulting firm for the remainder of the Technical Assistance services.

Since there is already a suitable candidate for the Senior Advisor post with excellent Malawi experience in a critical position, it is proposed that negotiations be opened between USAID and the candidate for this position, in accordance with Handbook 11, Chapter 1, Annex A. If the negotiations are unsuccessful, the position could either be advertised, or combined with the second technical assistance contract which will be an AID Direct Contract, so that MOTC is not overloaded with contracting responsibilities (they are short of staff and have little past experience in contract administration).

The second contract would be procured on a competitive basis in accordance with FPR 41. It is proposed that an RFTP (request for technical proposal) be prepared on the basis of descriptions in Annex F6 immediate upon project approval, and that an advertisement be placed in the Commerce Business Daily at that time. In order to speed up the process no prequalification will be required.

The responding proposals would be evaluated first on technical grounds, and then cost negotiations would start with the most qualified firm. If these are unsuccessful then negotiations with the second most qualified firm would commence.

An AID direct contract is anticipated for the same reasons stated above, so as not to overload MOTC's contracting capabilities. The proposal evaluation and selection committee would be chaired by MOTC with USAID participation.

The Contract shall state that the successful consultant is expected to subcontract part of the work to local Malawi individuals or firms with suitable qualifications in order to minimize costs. It is also anticipated that the successful Consultant will procure vehicle inspection equipment and training equipment that cannot be obtained in Malawi, on a fixed fee basis.

IV. PROJECT MONITORING

Project monitoring will occur through four different mechanisms corresponding to the four main project elements: transport industry training, transport equipment credit, Vehicle Inspection Systems, and MOTC planning.

A. Monitoring of Transport Industry Training

This would be handled primarily by DEMATT which would be involved with the initial screening of applicants for training and needs assessment, and the design of individualized training programs. A DEMATT Business Advisor would be assigned to each transporter in the program, and the Advisor would be responsible for reporting on progress on a monthly basis during the training program, and on a quarterly follow-up program. A one-half to one page summary report will be prepared on each transporter and submitted to the Training Task Force. The Polytechnic will provide a roster of all students who enter their transportation training courses, and keep a record of the number who successfully complete each course. A report on the degree of success of each course will be prepared quarterly for the review of the Training Task Force.

The Training Coordinator/Advisor will play a key monitoring role on a week-by-week basis. He will suggest meetings of the Training Task Force as required for monitoring. These will be at least once a month during the start-up period (see diagram under training implementation above).

B. Monitoring of Transport Equipment Credit

The main responsibility for monitoring this activity will fall on INDEBANK. INDEBANK will appoint a specific person with transportation industry experience to oversee the loan program. This person will be

responsible for a monthly summary of the status of all loans, which will be supplied to the MOTC Project Director. This person will discuss any problems with loan repayment with the DEMATT Business Advisor, and prepare a report on cases which are more than one month in arrears. The loan program will be reviewed on a quarterly basis with the Project Implementation Committee.

C. Monitoring of Vehicle Inspection Systems:

This will be the responsibility of the RTC. He will report quarterly to the Project Implementation Committee on progress.

D. Monitoring of MOTC Planning:

This will be the responsibility of the Project Director. He will report to the Project Implementation Committee on a quarterly basis.

V. SUMMARIES OF ANALYSIS

The analysis which lead to the definition of each of the three project components is described below, followed by analysis of special issues raised in the PID approval cable.

A. Training

Two elements were considered here: (1) training for private sector international trucking industry, and (2) training for public sector transportation planning and regulation. By far the greatest emphasis is placed on the first element, and it is the subject of a detailed annex (F4).

1. International Trucking Industry Training

A detailed analysis and training program is given in Annex F4. This section summarizes the analysis and recommendations contained in that annex.

Training under the project will be designed to respond rapidly to the transport crisis facing Malawi and the requirements for long-term evolution of the currently infant Malawian international transport industry. Currently, the Malawian trucking industry is largely confined to domestic haulage. Operators generally lack the capital, management skills, or mechanical training necessary to maintain viable international haulage. The program will be geared to international trucking, but will also allow participation of domestic truckers where there is excess capacity.

The training program will also be designed to maximize existing training facilities and institutions in Malawi and to provide an in-country capacity at the end of the project life for these institutions to provide ongoing training for international truck transport. The project is keyed to an early start-up and entrance of qualified Malawian truckers into international haulage as soon as possible to reduce the drain on foreign currency for the services of foreign transporters. This will be facilitated by umbrella organizations which will offer training, with the assistance of other organizations, in conjunction with the provision of their full package of services (this assistance has been offered by two organizations in preliminary discussions).

Participants receiving training under the project will pay at least a minimal or token fee for the training they receive. This will serve as a useful index of serious interest and facilitate the transition by the end of project life to a program which is self-supporting from fees and decreasing contributions from the revolving local currency fund.

a. Manpower Requirements

On the basis of the analysis of Malawi fleet requirements in Annex F8, and consultation with the MOTC, training is needed for approximately 200 individuals. Included among these are:

- Operations manager/planners	4
- Owner-operators	25
- Vehicles operators/drivers	100
- Operations supervisors	10
- Maintenance planners	4
- Financial managers	10
- Terminal supervisors	10
- Loading/unloading supervisors	30

This estimate is dependent upon multiple variables, including the availability of suitable vehicles for international transport. An alternative view of manpower requirements is keyed to skill categories. This provides for cross training, i.e. training an individual in more than one area. It indicates the following requirements:

- Long distance driving techniques	140
- Loading techniques	165
- Preventive maintenance planning and organization	33
- International operations (laws, regulations, procedures, documentation, etc.)	140
- Terminal operations	14
- Financial record-keeping	35
- Costing and pricing	35
- Financial management	35

b. Existing Institutions

The training design is keyed to the maximization of existing training capabilities in Malawi. The major institutions identified include:

The Development of Malawian Traders Trust (DEMATT)

DEMATT was established to facilitate the growth and financial viability of small business operations in Malawi. It is keyed to one-on-one training with specially-trained business advisers engaged in on-the-job or on-site training. DEMATT's participation in the training will establish a permanent in-country capacity for training small trucking operations. DEMATT's approach to training is especially well suited to the training requirements of this project. It includes the extensive use of assessment, monitoring, and evaluation exercises. This will be implemented in support of monitoring and coordination responsibilities of the Training Coordination Adviser to be provided under the technical assistance component of the project.

The Polytechnic

The Polytechnic offers degree and diploma courses with a technical orientation. The programs are divided into three divisions: The Faculty of Commerce, the Faculty of Applied Studies, and the Faculty of Engineering (see Figure F4-1 in Annex F4). Each in turn is subdivided into three departments. Those pertinent to this project are:

The Department of Business Studies
The Department of Accountancy
The Department of Management Studies
The Department of Mechanical Engineering

MALTRACO

MALTRACO, as one of the major suppliers in Malawi, maintains service centers in both Blantyre and Lilongwe. In conjunction with the service center in Lilongwe, there is an especially well equipped training facility. MALTRACO has extensive audiovisual programs which it makes available to purchasers of its equipment. Programs include preventative maintenance systems, full mechanical and electrical systems, and associated subjects relevant to the operation of heavy vehicles. MALTRACO has expressed its willingness to participate under the project by assisting DEMATT and the Polytechnic as well as opening short courses to operators not operating MALTRACO-supplied equipment. Any other supplier under this project would be expected to provide the same services and training facilities.

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c. Basic Program Elements and Implementation

The components identified and included in the project design include:

- Supplier training
- On-the-job training
- Short courses and seminars
- Demonstration Units
- Full-term courses
- Internships
- Overseas training

(Overseas training and counterpart training of MOTC staff under the technical assistance component of the project are discussed in the following section.)

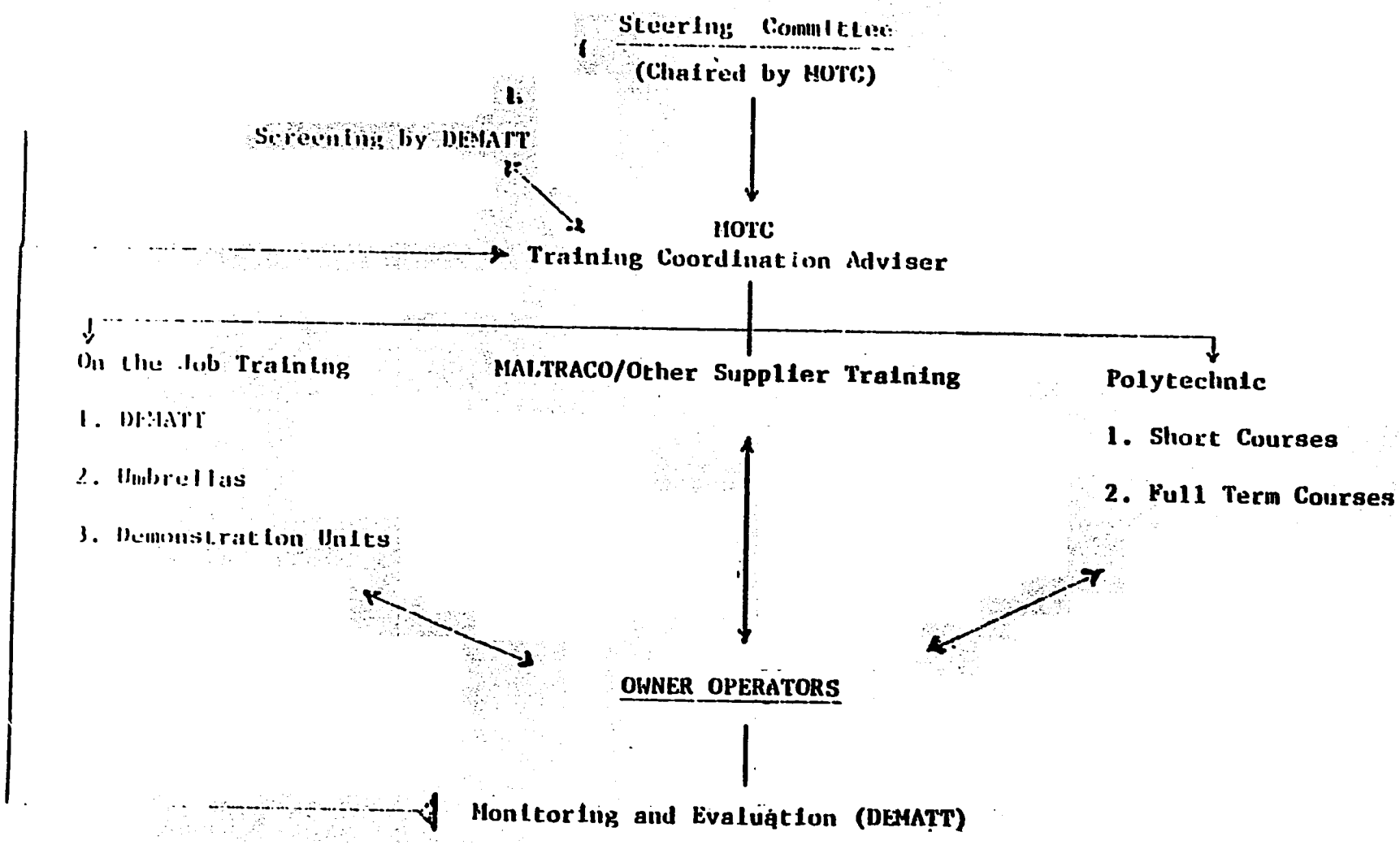
On the basis of the needs assessment conducted in conjunction with project design and interviews conducted by the consultants, the following areas were identified for inclusion in the training design:

- Financial Management and Control for Trucking Operations
- Operational Planning
- International Marketing
- Terminal Operations
- Personnel Supervision and Training
- Long Distance Driving
- Preventative Maintenance System Planning
- Mechanical

To be effective, the training to be provided under this project must be keyed to the specific needs of each operator. DEMATT will conduct a needs assessment of each operator and his staff to determine his skills level and training requirements. DEMATT will also assist in the preparation of financial packages for those interested in financing equipment purchases. Operators will then participate in an individualized training program including one or several of the training components identified above. DEMATT will help the Polytechnic develop first short courses, then demonstration units, and in some cases, full term courses. DEMATT will also assist training activities in the umbrellas and will perform evaluation and monitoring services to validate the effectiveness of the training program (see Figure 2).

Coordination of the program will be the responsibility of the Training Coordination Adviser who will be assigned to the Road Traffic Commission. He will serve as Secretary to a Training Task Force which is to be chaired by the MOTC, and he will prepare a monthly report for presentation to the Task Force (see Annex F4 for more details).

STRUCTURE OF THE TRAINING PROGRAM



2. MOTC Training

The MOTC has become the focus of transportation crisis response in Malawi, dealing with transport bottlenecks as they arise. An emergency Task Force has been formed to obtain and analyze critical information regarding the orderly flow of imports and exports. The Emergency Task Force, comprising private sector representation then plans and recommends priorities, routing and transport modes for the shipping industry. In addition, the MOTC Road Traffic Commissioner has the responsibility to inspect the fleet and set standards for vehicles and operators used in international road haulage.

The present MOTC staff is performing well, but in need of substantial support in order to respond to this recent increase in responsibilites. Also the Road Traffic Commissioner's office has only very basic facilities and staff for vehicle inspection. The major pieces of equipment needed to carry out its vehicle inspection functions are inoperable. A combination of equipment and training is required to bring this office's capabilities to the level needed (see further discussion under equipment). Staffing needs for both departments were assessed internally in May 1984, and these analyses are given in Annex F2. Further staffing at the P.O. and inspector levels is required to make both offices more functional. Increased staffing is planned by the MOTC.

Substantial on-the-job training will be provided by the technical assistance to these offices described in Section C below. However this must be supplemented by overseas training in some cases, to be effective. Within the MOTC Transport Department the need for a 2-year overseas training course for one senior transport officer was recommended in the recent USAID-funded Transport Sector Assessment by Louis Berger International. This was confirmed by the PP design team which also identified two qualified candidates in that department. This training would take place in the second year of the project.

Further short-term overseas study tours of similar operations will be needed to strengthen the capabilities within the Road Traffic Commissioner's Office. It is anticipated that four 3-4 month study tours will be needed plus possible short term on-the-job training course (e.g., for computer installation and programming). The exact content and schedule of these study tours will be arranged by the training coordinator.

b. Equipment

Several types of equipment are included in the project; heavy trucks for industry use, training equipment, vehicle inspection equipment, computer equipment, and MCTC support equipment and vehicles.

1. Heavy Trucks for Industry

The approach to this analysis was to first estimate the number of trucks needed for international trucking, with special attention given to the transport requirements of Malawi's agricultural exports and imports. This required making several assumptions about the future course of events in Mozambique over the next 5 years, under four separate scenarios.

Next, the share of Malawi truckers in the industry was assessed for these scenarios. The number of existing vehicles capable of efficient international haulage was then estimated and subtracted from the Malawi share, and finally a reasonable proportion for AID financing was determined (detailed backup calculations and assumptions are provided in Annex F10).

Scenario 1: Continuation of the present situation until 1989

The total demand for tonnage transport by road under this scenario is shown in Table 7, along with the associated demand for truck trips and the potential for the Malawian truck fleet. The range of new vehicles needed in the Malawi fleet is from 90 to 99, under present conditions, over the next 5 years.

Scenario 2: Beira Line Reopens after 1985

Under this scenario, the Mozambique conflict is resolved, and the Beira line gradually comes back into service. The Nacala line is rehabilitated as planned, and the treaty between Mozambique and Malawi concerning rail road use (65% Nacala - 35% Beira) is applied.

This would result in a gradual shift of traffic back to the rail routes of up to 70% of total import/export traffic. The international road haulage industry will still be more important than it was before 1982, due to the shifting toward regional trade, and the improved access to neighboring states, but the tonnage hauled will decrease sharply from the present.

The potential for Malawi trucks under this scenario ranges from 28 to 80, as shown in Table 7.

TABLE 7

MALAWI TRUCK INDUSTRY POTENTIAL BY SCENARIO

	Scenario 1		Scenario 2		Scenario 3		Scenario 4	
	Max	Min	Max	Min	Max	Min	Max	Min
1. Total Tonnage per year by road (000)	705	615	615	281	615	496	795	539
a) Import	460	390	390	183	390	317	533	350
b) Export	245	225	225	98	225	180	262	189
2. Total Trucks Required	463	400	400	193	400	324	525	354
3. Potential for Malawi trucks	139	120	120	58	120	97	210	142
4. Existing Malawi Fleet	40	30	40	30	40	30	40	30
5. Additional Truck Potential	99	90	80	28	80	67	170	112

Source: Annex F8, Section (b)

Scenario 3: Present Situation with Nacala line Rebuilt in 1986

This scenario is the most likely future now facing Malawi over the next 5 years. The result will be an increasing capacity of the Nacala Line and a gradual shift to more rail use over the period 1987-1989. This has the effect of gradually reducing road traffic in this period despite the increase in total exports and imports.

The number of trucks that could be added to the Malawi fleet under this scenario varies from 67 to 80.

Scenario 4: Nacala Line and Tete Road are Closed due to Increased Conflict in Mozambique

This scenario represents the worst case for the country with a major impact on both the economy and on road transport. The total tonnage exported and imported would decline sharply, while road transport to Zambia and Tanzania would increase, since they would be the only routes available.

The maximum number of trucks that could be acquired by Malawi transporters in this case would range from 112 to 170.

Considering all four scenarios shown in Table 7 and the resulting demand for trucks in each case it appears that an AID level of 10-15 vehicles could be easily absorbed into the demand under even the worse case scenario for the truck industry (Scenario 3).

In fact it is clear that in all cases the demand will be very substantial over the next 2-3 years. It is critical to the development of the Malawi trucking industry and the transportation security of Malawi that at least 60-80 trucks be added to the existing fleet of efficient international heavy transport vehicles to approach the present potential for 120 vehicles in Malawi.

Some of this supply will come from normal commercial channels which supply 10-20 vehicles per year. Press Transport, the largest transport company in Malawi has just ordered several new Mack tractors (horses) under EXIMBANK financing from the U.S. to replace its older fleet which was becoming inadequate for economic long distance haulage.* However, this action will only maintain the existing fleet.

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*The execution of this order is stalled at this time due to the lack of a government guarantee required by EXIMBANK. This problem may be resolved shortly, but at a lower level of purchase - approximately 14 tractors. On the other hand German Aid is discussing a 10 truck grant.

To confirm the existence of demand for the trucks proposed under this project, given the specific loan conditions as described, INDESAMA carried out a survey of the smaller transporters who were qualified for international transport, and identified at least 12 who were interested in this specific program (see Annex F5).

This interest was confirmed in the DEMATT/Polytechnic survey of truckers when 6 out of 9 expressed definite interest in the loan program. The remaining 3 operators said that they would be interested if the terms were attractive. This survey covered the full size range of operators and was probably representative of the industry as a whole. This would indicate that 2/3 of all trucking firms (and especially owner-operators who have difficulty getting credit) are interested in the program.

In summary, it appears that for the next 5 years there will be a large demand for international heavy transport vehicles on the macro-economic scale. This demand has been confirmed on the micro-economic level as well, and could accommodate at least three to four times the proposed 10-15 AID-financed vehicles. This analysis therefore supports the establishment of a revolving loan fund for transport equipment.

2. Training Equipment

The need for training equipment was identified as part of the detailed training program (see Annex F4). Equipment lists were solicited from the institutions to be involved, and these were then examined for their pertinence to the program by the PP team. Where there was some question as to the cost effectiveness of the proposed equipment, it was excluded from the initial procurement under the project and made conditional upon a review of specific training needs after the training program begins.

3. Vehicle Inspection Equipment

Discussions with MOTC planning personnel and the Road Traffic Commissioner's office of the MOTC, and site visits revealed that the present vehicle inspection equipment is woefully inadequate and mostly inoperable. They are not in a position to inspect the key safety features of heavy transport vehicles except by simple visual examination.

It is apparent that four basic pieces of equipment are the minimum needed to effectively carry out the vehicle inspection function in the Road Traffic Commissioner's office: Headlights and testers, wheel alignment testing equipment, brake testers, and emissions testing equipment. The first two require relatively simple equipment, while the latter two are more complex. It is clear that the most simple, maintenance-free type of equipment is needed considering present staff capabilities. Although improvement in staff skills is expected under the GOM program.

The GOM program calls for the establishment of three operational inspection stations. The PP design team feels that two stations (Blantyre and Lilongwe) are adequate for present needs, since the trucking industry is now concentrated in these areas. The third station could be considered as a later phase of the project.

4. Computer Equipment

Two critical uses have been identified by the GOM for small computer applications. The first is the emergency transportation planning data base, maintained in the MOTC planning office and used by the Transportation Emergency Task Force for fast response decisions and analysis. The data base is composed of border transit station data, customs data, and transportation tariffs. Other types will be added later. A program has already been written (with USAID financing) for a small computer being used in the Ministry of Agriculture's Planning Division.

The types of equipment needed to support this data base and the projected programs were discussed with a computer supply firm which had designed the existing program for MOTC. The minimum configuration was found to be a microcomputer with 512 KB core memory and a 10 MB hard disk. Floppy disk capability, word processing, and spread sheet programs were included in addition to the data base management program, as cost-effective components for the maximum utilization of this equipment. MOTC staff and advisors have the capability to use this equipment.

The Road Traffic Commissioner's office is the site for the second proposed computer application. It was apparent from visits to the office that a data base management system would be a valuable addition to the efficiency of the operation. Since this office was already scheduled for computerization by the GOM, the PP design team felt that it would be a valuable component that could be cost-effectively implemented under this project. The GOM has scheduled computer training for additional Road Traffic Commission staff.

The location of the equipment would therefore be 1) in the MOTC planning unit office in Lilongwe and 2) in the Road Traffic Commissioner's main office in Blantyre. Other locations were considered, but these were the clear choices.

5. Vehicles for MOTC

Three vehicles are needed to support the proposed technical assistance staff. After analysis of proposed types of use with MOTC staff it is proposed that these vehicles include two compact size vehicles for use on larger road trips; one to be assigned to MOTC headquarters, and one to be assigned to the Road Traffic Commissioner's office in Blantyre. The third vehicle could be a sub-compact type mainly for in-town use in Lilongwe by the MOTC technical assistance staff.

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Provision for some maintenance costs of all the equipment described above is also viewed as necessary by the PP design team and the MOTC. This could be accomplished via the local currency fund, to be evaluated on an annual basis.

C. Technical Assistance

The type and level of technical assistance needed for this project was the object of several discussions with MOTC, DEMATT, the Polytechnic and the Road Traffic Commissioner's office, as well as private organizations that could be involved in the training function. The perspective taken in this analysis was to maximize the use of local institutional staff and the on-the-job training potential of the technical assistance, while at the same time maintaining the flexibility to inject different kinds of expertise as needed.

Three types of long-term technical assistance was identified, as well as a series of short-term technical assistance assignments.

The first type of long term need was for a Training Coordinator who has a background in Trucking industry training and inspection of motor vehicles. This person would be required to handle a variety of assignments including:

1. Monitoring of and assisting in the development of training programs in the Polytechnic, DEMATT, the dealer and umbrella organizations, and the Road Traffic Commissioner's office.

2. Identifying with these organizations the specific needs in short term technical assistance and coordinating the provision of this technical assistance.

3. Supporting the improvement of vehicle inspection and data base management functions in the Road Traffic Commissioner's office.

Several possibilities were examined for this function, including whether it should be split into two functions, with the training person placed in the Polytechnic as proposed in the PID. Due to the number of institutions involved, it appears that the Polytechnic would be only one element of the training program, and probably not the largest. This meant that some place other than the Polytechnic could be desirable, as this organization does not really need a full time coordinator to meet their needs.

The fact that the MOTC should play the key monitoring role for the project as a whole was also considered and this raised the possibility of a location at MOTC headquarters in Lilongwe. However this option was regarded as over loading the headquarters, which also has more of a planning function rather than implementation. This position was seen to be a more practical implementing position, and the key actors would also be located in Blantyre.

Finally the opportunity for one person to handle both coordination of training and support of long term development in the Road Traffic Commissioner's Office, seemed to be attractive for a cost-effective approach, provided the individual required was not too unusual. The different job aspects were considered and the combination of skills seems to the PP design team to be obtainable. Consequently a combined position in the Road Traffic Commissioner's Office was selected.

The other two long term positions were much more clear cut. They are designed to support the MOTC planning and policy function, especially with respect to development of the international trucking industry. One position of long term advisor already exists in the MOTC and fulfills a key technical analysis role in the on-going transportation crisis Task Force, and its funding has run out. (USAID is temporarily supporting this function at present). The second long term position would simply fill the key slot of Senior Transportation Officer in MOTC planning (see Annex F2 for an organization chart of the MOTC). These positions are clearly central to the project implementation and have a key role in support of project monitoring and coordination with MOTC policy.

It was recommended by the MOTC that there be an annual review of the technical assistance roles, so that the types of assistance provided could be reevaluated, if needed and adapted to changing MOTC needs. This has been incorporated into the project evaluation function.

Finally the short-term technical assistance was evaluated. Certain functions are clearly needed at this point, while others are generally foreseen, but would need to be specified when the training programs actually take shape. Consequently a flexible approach was selected whereby some of the short term positions would be specified as the project progresses. This would be included as part of the job of the training coordinator. An estimated 18 person-months of short-term assistance is needed.

The types of short-term assistance that has been identified include:

a. support to the Polytechnic in setting up an International Drivers Certificate course and examination;

b. trucking industry management course design;

c. practical assistance to umbrella organization training programs;

d. vehicle inspection program assistance to the Road Traffic Commissioner; and,

e. data base management training and software design for MOTC and Road Traffic Commissioner's office.

f. project management and implementation assistance.

For these and other types of training, the option should be left open to provide expertise from local sources in Malawi to supplement the expatriate technical assistance staff, where this seems appropriate.

The overall project design and implementation should focus on the provision of comprehensive, but flexible support to the Malawi transport industry and to the MOTC functions that monitor, encourage and regulate this industry.

D. Issues Raised in the PID Approval Cable

1. MITCO Operations

Discussions were held by the PP design team with MITCO and GOM officials concerning the mode and scope of MITCO operations. The present and anticipated operations of this company are restricted to a freight booking agency which competes with forwarding agents that are still very much in operation in Malawi. It arranges for front and backhaul loads for international freight and bids for freight haulage contracts with both private companies and government agencies. It then contracts with both Malawian and foreign transporters to carry the freight. It does not own vehicles, and does not plan to go into the physical transportation part of the business. (See Annex F2 for the MITCO legal status)

Although MITCO is 60% owned by FINCOM which is a subsidiary of ADMARC, a parastatal, it is managed by the other partner which is Balfour and Williamson, a private, London-based banking house. MITCO is registered in London, and operates as a private international firm, although its principal offices are in Lilongwe.

The actual competitive position of the company is quite good since it deals in large quantities of goods, and charges a straight fee instead of a percentage rate which the competing freight forwarders charge. Its fee usually comes to a much smaller percentage. In addition since it combines both front and backhaul, it is able to give round trip rates which minimize the total transport costs, and pass this savings on to the shipper. This has allowed MITCO to bid low on several large contracts and successfully compete with Zimbabwean and Zambian firms.

The actual portion of the international transport business that MITCO has procured, amounts to less than half of the total export and import traffic. This percentage is as follows for major products:

Sugar	40%
Tobacco	80%
Tea	40%
Maize	30%
Other Exports	10%
Fertilizer	60%
Fuel	20%
Other Imports	10%

This list clearly shows that MITCO is not in a dominant position for freight booking, except for tobacco and fertilizer. These were contracts that MITCO won on a competitive bid basis. GOM officials confirm that MITCO operates independently as a private firm. Consequently, the design team concludes that there is no danger of the project supporting a government-owned monopoly. In fact, the existence of MITCO has made the international transport industry serving Malawi more competitive, and has lowered significantly the amount of foreign exchange that Malawians have had to spend on both imports and agricultural exports.

MITCO's operating policy on the access of truckers will have important implications for the success of the proposed project. However its present policy favors Malawian firms by giving them preference over foreign firms and provides a 10% cost differential to Malawi firms, reflecting higher fuel and equipment costs in Malawi. This differential is counteracted by the ability to pay these truckers in Malawian currency, and save foreign exchange costs which are in acute shortage in Malawi. The shadow costs of foreign exchange is much higher than 10% and therefore this policy is in the economic interest of Malawi.

The access policy described above definitely favors Malawian truckers of the type to be encouraged under the proposed project. The smaller transport firms, however are more likely to get a part of MITCO's business if they subcontract to a larger firm that has the ability to handle billing and other arrangements efficiently. The General Manager of MITCO has said that their policy is to encourage small Malawian firms as long as they can be reliable and accurate in their invoicing. He identified two smaller firms that meet this criteria. Otherwise MITCO would prefer dealing with an umbrella organization that can show a track record in efficient and honest dealings. This position also supports the design team's analysis of the optimum arrangement for the development of the Malawi transport industry (see Annex F8). In any case the transporters supported under the project will be free to find a market in any place they can, and do not have to contract with MITCO to sustain their business.

2. Equal Access to Project Credit, Training, and Permits

After some discussion of the equal access issue with both MOTC and MOF, both ministries have agreed that the principle of equal access for all Malawi citizens should apply to this project, and to the issuance of Road Service Permits for transporters supported by the project. An appropriate covenant has been drafted in the following section.

3. Profitability of Transport Firms

This issue is addressed in Annex F8. The business is a relatively difficult one, but the PP design team is convinced that a trucker can operate at a profit. This position is supported by some of the more successful small transporters in the international haulage business. The consensus seems to be from the DEMATT/Polytechnic survey that international trucking is now more profitable than domestic trucking.

4. Eligibility for Loan Funds

This issue has been discussed in detail with INDEBANK and the MOTC, and they have no problem with the idea that the project should favor small truckers. In fact this is also the MOTC policy, as long as the small truckers can operate efficiently and be well prepared for the problems of operating in foreign countries. The agreement with INDEBANK will specify that at least 50% of the amount of credit provided will go to small operators or owner-operators. In addition the design of the project is oriented to providing the small businessman with all the necessary support so that he or she will be successful in obtaining credit if the firm appears to be serious about entering the business.

5. Effect of the Hire-Purchase Act

The constraining effect of this act has been mitigated by the recent changes enacted by the GOM which extend the length to four years and reduce the down-payment to 20%. This is considered by the PP design team as quite suitable for the international transport business. In addition the project design provides for three alternate means of purchasing or leasing the equipment at the option of the buyer.(See Annex F5 for details.)

6. Training Issues

A detailed training program is presented in Annex F4. This program has significantly reduced costs per trainee due to the efficient use of local institutions. The recovery of some of the costs of training is provided for in the project design, and cost recovery is scheduled to increase over the project life.

The use of local currency funds to cover local currency training cost after the first year of the project is included as part of the project design, and agreed by the GOM.

7. Exclusion of Law Enforcement Activities

There does not appear to be any conflict with Section 660 of the Foreign Assistance Act as there is no law enforcement activity of the MOTC. The licensing itself and vehicle inspection functions are strictly to certify drivers and vehicles for operations. All enforcement of laws and investigation of violations is handled completely separately by the police.

8. Procurement Issues

The trucking equipment procurement will be competitive, and two interested firms have been briefed by the PP design team. A procurement plan has been included with the implementation plan to deal with these issues.

9. Effect of Recent EXIMBANK Loans

The design team has discussed the impact to these two loans in the above analysis of truck demand and concluded that the 2.8 million dollar loan (now reduced to approximately 1.8 million) for sale of trucks to Press Transport will only maintain present fleet size, and in fact is not sufficient to do that under present arrangements. The second loan to MALTRACO is to be used primarily for Caterpillar equipment, and should have a negligible effect on truck demand.

VI. CONDITIONS, COVENANTS, AND NEGOTIATING STATUS

At the time of Project Paper preparation, the project has been thoroughly discussed with each of the participating implementation organizations including the following:

- Ministry of Transport and Communications
- Polytechnic
- DEMATT
- INDEBANK
- MALTRACO
- "Umbrella Organizations"(e.g., Press Transport, Maltruck, etc.)

Key central ministries have been involved in the project planning process and have reviewed the project document. In general, the project has received highly favorable reactions from all organizations involved. USAID/Malawi expects that negotiations to obligate project funds with Government can be completed in about thirty days from the time that the project is authorized.

As conditions precedent to initial disbursement of project funds, USAID/Malawi is requesting the following:

The name and specimen signature of the individual designated as Project Director for the activities of the Project.

Prior to the disbursement of project credit funds for transport equipment, USAID/Malawi proposed the following Conditions Precedent:

(a) An executed loan agreement between the Government of Malawi and INDEBANK governing the use and repayment of project credit funds used for the procurement of heavy duty trucks, trailers and spare parts, in form and substance satisfactory to AID.

(b) Evidence that a Special Account has been established into which INDEBANK will repay project credit funds which it administers and procedural guidance, in a form and substance satisfactory to AID, which spells out clearly how funds deposited in the Special Account will be managed and used.

The project as designed contains several assumptions which must be valid for the project to achieve its overall purpose. USAID/Malawi suggests several covenants which will serve to draw attention to what are believed to be critical assumptions.

(a) The Government of Malawi agrees to process expeditiously the application of road service permits submitted by Malawian transporters especially those participating in the credit and training elements of the project.

(b) The Government of Malawi agrees that the issuance of road service permits and licenses shall be conducted in a manner insuring (a) equal access for all Malawian citizens and (b) the development of a competitive and efficient national capacity for international road haulage.

(c) The Government of Malawi agrees to provide adequate personnel in support of the MOTC emergency transport planning and monitoring function and for the international transport which inspection and licensing function of the Road Traffic Commissioner's Office.

(d) The Government of Malawi agrees to provide suitable housing, office space and support staff of the Project-financed long-term technical assistance team.

(e) The Government of Malawi agrees to take responsibility for the implementation steps specified in Table 6 as MOTC, RTC or MOF responsibility, and will make all possible effort to maintain the schedule in that table.

VII. EVALUATION ARRANGEMENTS

The project evaluations will take place on an annual basis. They will be part of a 1-2 day evaluation workshop which will be scheduled at the end of each project year. The workshop will be attended by the members of the Project Implementation Committee. It will examine progress during the year in all aspects of the project, and also the overall impact on the Malawian international transportation industry which should be available from the MOTC data system. This will be supplemented by reports from the TCA, DEMATT and the RTC.

The aim of the evaluation workshops will be to assess those areas which are working well and those which are not, and to design the next years work plan to improve on the project's performance.

The workshop will also be a good time to evaluate and plan the uses of the local currency fund.

A major outside evaluation will be planned toward the end of the second year of the project. This evaluation will be carried out by a

USAID Team, and it will focus on the overall effect of the project in meeting project objectives as outlined in the logical framework. This will include:

a. Increased role of Malawians in international road transport (especially for agricultural exports and imports).

b. Greater efficiency on the part of Malawian transporters.

c. Efficient use of the training and equipment supplied under the project.

d. Adequacy of Technical Assistance to support MOTC Emergency Task Force and the Vehicle Inspection and licensing program.

e. The degree to which the project has supported development of Malawi training institutions.

f. Project impact on agricultural prices and particularly on small landholders.

The evaluation team will present and discuss its findings to the Project Implementation Committee, and recommend modifications in project implementation, if necessary.

ANNEX A

PID APPROVAL MESSAGE

UNCLASSIFIED

LILONGWE

ANNEX A

ACTION

ACTION	
AID	
INFO	
AID	
DCM	
ECON	
GSO	
COM	
ADMIN	
DOD	
DAO	
AID	
PC	
CHG	
D'TEMP	
RF	
CHRON	

- HHHHVV LG0707
OO RUEHLG
DE RUEHC #5452/01 1020843
ZNR UUUUU ZZH
P R 110740Z APR 84 ZDK CTG RUEHLG 0001S
FM SECSTATE WASHDC
TO RUEHLG/AMEMBASSY LILONGWE PRIORITY 4381-04
INFO RUEHNR/AMEMBASSY NAIROBI 0845
BT
UNCLAS SECTION 01 OF 02 STATE 105452

AIDAC, NAIROBI FOR REDSO

E.O. 12356: N/A
TAGS:
SUBJECT: MALAWI COMMERCIAL TRANSPORT PROJECT: 612-0218

REFERENCES: (A) LILONGWE 1002, (B) LILONGWE 1028, (C) STATE 080632

1. ECPR MEETING ON SUBJECT PROJECT HELD THURSDAY, FEBRUARY 16, 1984. MEETING CHAIRED BY DAA/AFR/ESA. ECPR RECOMMENDED APPROVAL OF PID AT THAT TIME; HOWEVER, BECAUSE OF NEED TO CLARIFY POLICY ISSUES RELATED TO GOM'S PARTICIPATION IN INTERNATIONAL ROAD HAULAGE INDUSTRY, REGRET THIS MESSAGE HAD TO BE DELAYED AND REF C SENT. APPRECIATE MISSION FORWARDING REFS A AND B IN RESPONSE TO REF C. THIS MESSAGE CONSTITUTES PID APPROVAL PROVIDED THAT MISSION ADHERES TO THE GUIDANCE PROVIDED BELOW IN DEVELOPING THE PP.

2. ONE OF THE AGENCY'S MAJOR OBJECTIVES IS TO STIMULATE THE GREATER USE OF MARKET PRINCIPLES AND OPEN COMPETITION IN ORDER TO INCREASE EFFICIENCY IN THE USE OF SCARCE RESOURCES. THIS OBJECTIVE IS PARTICULARLY RELEVANT IN AFRICA WHERE, IN MANY COUNTRIES, PARASTATALS AND OTHER GOVERNMENT-SPONSORED ENTITIES OFTEN CONTROL PRICES AND STIFLE COMPETITION, RESULTING IN HIGH-COST, INEFFICIENT MONOPOLISTIC OPERATIONS.

3. WE UNDERSTAND THAT IN MALAWI WITH ABOUT 70 PERCENT OF ALL FREIGHT NOW MOVING BY ROAD, THERE IS A STRONG INTEREST IN ENCOURAGING THE DEVELOPMENT OF AN INTERNATIONAL ROAD HAULAGE INDUSTRY WHICH CAN COMPETE WITH SIMILAR INDUSTRIES IN THE NEIGHBORING COUNTRIES. HOWEVER, AID SHOULD NOT PROVIDE ANY ASSISTANCE IN THIS AREA IF THE MALAWI INTERNATIONAL TRANSPORT COMPANY (MITCO) BECOMES, IN EFFECT, A GOVERNMENT-SPONSORED MONOPOLY.

4. REF (A) IS ENCOURAGING IN THAT GOM HAS INDICATED THAT MITCO WILL OPERATE AS A PRIVATELY-FINANCED AND OPERATED ORGANIZATION, INDEPENDENT OF GOVERNMENT, OPERATING UNDER OPEN, COMPETITIVE MARKET CONDITIONS PER PARA 2(A) AND PER PARA 4(D) IT IS INTENTION OF GOVERNMENT THAT MITCO SHALL NOT BE A MONOPOLY AND THAT OTHER MALAWI ORGANIZATIONS ARE FREE TO ENGAGE IN OR OFFER SIMILAR SERVICES.

5. THE PP MUST BE DESIGNED SO AS TO INSURE THE REALIZATION OF THESE OBJECTIVES. PP DESIGN TEAM MUST CAREFULLY EXAMINE ALL PROPOSED OPERATIONS FOR MITCO, E.G., ACCESS TO FUEL, FOREIGN EXCHANGE, CONTROL OVER BACKHAUL BUSINESS, ETC. AND PRESCRIBE ANY POLICIES THAT [illegible] BE NEEDED FOR FULL AND EFFECTIVE PARTICIPATION BY ALL PRIVATE MALAWI ROAD HAULERS. IN PARTICULAR, MITCO MUST [illegible] AIM OF GOVERNMENT CONTROL OVER THE TRANSPORT INDUSTRY (EITHER DIRECTLY OR THROUGH A GOVERNMENT-SPONSORED MONOPOLY) [illegible] THIS WOULD BE SEEN AS AN [illegible] TO EFFICIENCY AND OPEN COMPETITION. THE PROJECT SHOULD INSURE THAT ALL COMPETITION. THE

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SECTOR HAVE ANYMORE. INCENTIVES AND OPPORTUNITIES FOR ENTERING ROAD HAULAGE INDUSTRY AND THAT ANY HAULER MAINTAINS THE OPTION TO OPERATE INDEPENDENTLY OF MITCO.

C. PER REF (B) AID/W RECOMMENDS THAT PP CONTAIN COVENANT THAT GOM ISSUANCE OF INTERNATIONAL LICENSES AND OPERATING PERMITS BE FREE FROM RESTRICTIONS BASED ON ETHNIC ORIGIN SO AS TO DEVELOP A COMPETITIVE AND EFFICIENT NATIONAL CAPACILITY FOR INTERNATIONAL ROAD HAULAGE.

7. ECPR PROVIDED ADDITIONAL GUIDANCE AND MADE THE FOLLOWING RECOMMENDATIONS WHICH SHOULD BE INCLUDED IN PP DESIGN:

--- A. MALAWI TRANSPORTATION SITUATION HAS SHORT, MEDIUM, AND LONG-TERM ASPECTS. PP SHOULD DESCRIBE OVERALL PROBLEMS AND EFFORTS UNDER WAY TO AMELIORATE THE SITUATION WITH SPECIFIC EMPHASIS ON HOW PROPOSED U.S. ASSISTANCE FITS INTO THE OVERALL TRANSPORTATION SITUATION.

--- B. PID MAKES THE ASSUMPTION THAT PRIVATE ENTREPRENEURS WILL FIND IT PROFITABLE TO OPERATE EQUIPMENT MADE AVAILABLE UNDER THE PROJECT. PP SHOULD PROVIDE A FINANCIAL ANALYSIS WHICH DEMONSTRATES THE VALIDITY OF THIS ASSUMPTION. THE BERGER SECTOR STUDY APPEARS TO BE A GOOD SOURCE FOR SOME OF THIS INFORMATION. PP DESIGN NEEDS TO DEVELOP CRITERIA FOR ELIGIBILITY OF LOAN FUNDS. AID/W DOES NOT WANT TO SEE ALL LOAN FUNDS GOING TO LARGE OR QUASI-GOVERNMENTAL FIRMS. PP DESIGN SHOULD ENSURE SOME SUBSTANTIAL PERCENTAGE OF LOANS (E.G., 50 PERCENT) WOULD BE RESERVED FOR SMALL FIRMS. MOREOVER, IF ACCESS TO CREDIT APPEARS TO INHIBIT PARTICIPATION OF SMALL BUSINESSES, ESTABLISHMENT OF CONCESSIONAL CREDIT PROGRAM MAY BE WARRANTED.

-- C. PP MUST SPECIFICALLY ADDRESS THE IMPACT OF THE GOM'S HIRE-PURCHASE ACT ON CREDIT TERMS AND FINANCING AS WELL AS HOW THE REQUIREMENTS OF SEC. 611(A)(2) WILL BE MET. SEC. 611(A)(2) REQUIRES THAT, IF LEGISLATIVE ACTION WITHIN A RECIPIENT COUNTRY IS REQUIRED TO ACCOMPLISH THE PURPOSE OF A PROJECT, NO OBLIGATION MAY BE MADE UNLESS THERE ARE REASONABLE ASSURANCES THAT SUCH ACTION MAY BE ACCOMPLISHED IN TIME TO PERMIT ORDERLY ACCOMPLISHMENT OF THE PROJECT'S PURPOSE. THUS, TO MEET THE LEGAL REQUIREMENT, THE PP NEEDS TO SPECIFICALLY ADDRESS: (1) WHETHER A CHANGE IN THE HIRE-PURCHASE ACT IS REQUIRED, AND (2) IF SO, WHAT SATISFACTORY ASSURANCES THERE ARE, THAT THE REQUIRED ACTIONS WILL OCCUR ON A TIMELY BASIS.

--- D. THE TRAINING COMPONENT NEEDS TO BE DESCRIBED IN MORE DETAIL IN THE PP. AS PRESENTED IN PID, COST PER TRAINEE IS HIGH. PP DESIGN TEAM SHOULD INCLUDE:

-- (1) APPLYING LOCAL CURRENCY GENERATIONS FROM COMMODITY IMPORTS TO LOCAL TRAINING COSTS RATHER THAN USING FOREIGN EXCHANGE FOR THIS PURPOSE;

-- (2) RECOVERING TRAINING COSTS THROUGH FEES PAID BY BENEFICIARIES OF TRAINING; AND

- (3) MAKING MAXIMUM USE OF EXISTING TRAINING FACILITIES OF THE PRIVATE SECTOR (I.E., MALTRACO, ETC.) AND PRIVATE TRAINING INSTITUTIONS IN DEVELOPING THE TRAINING PROGRAM.

-- E. (1) THE USE OF LOCAL CURRENCY GENERATIONS NEED TO BE DESCRIBED AND JUSTIFIED IN PP. IN PROGRAMMING LOCAL CURRENCY USES, ECPR BELIEVES IT IS IMPORTANT THAT GOM AGREE THAT SOME OF THESE FUNDS BE USED TO SUPPORT TRAINING EFFO[illegible]

-- (2) IN PROGRAMMING LOCAL CURRENCY GENERATIONS, CARE MUST BE TAKEN TO AVOID RUNNING AFOUL OF FAA SEC. 660 [illegible] ACTION AGAINST ASSISTANCE FOR LAW ENFORCEMENT ACTIVITIES

UNCLASSIFIED 3

-- F. AID/W HAS CONDUCTED INFORMAL SURVEY TO DETERMINE IF THERE ARE U.S. MANUFACTURERS OF TRUCKS OF SIMILAR CONFIGURATION TO EQUIPMENT PROPOSED FOR PROCUREMENT FROM MACK, WHICH EITHER HAVE OR ARE CAPABLE OF PROVIDING SPARE PARTS AND MAINTENANCE FACILITIES IN COUNTRIES THESE VEHICLES WILL BE OPERATING. IT HAS BEEN DETERMINED THAT THERE IS ONE OTHER FIRM WHICH IS CAPABLE OF PROVIDING THE TRUCKS AS WELL AS THE SPARE PARTS AND MAINTENANCE REQUIRED. THUS, THERE IS NO BASIS FOR A SOLE SOURCE WAIVER FOR THIS PROCUREMENT AND IT MUST BE COMPETED. RESULTS OF SURVEY POUCHED TO BAKER 28 MARCH.

--- G. ECPR RECOMMENDED THAT PP DESIGN TEAM INCLUDE SOME CONTRACT PERSONNEL FROM AFRICAN OR U.S. FIRMS WHO ARE IN INTERNATIONAL OR LONG HAUL TRUCKING BUSINESS SO THAT TRAINING AND OTHER ASPECTS OF THE PROJECT CONFORM WITH ACTUAL BUSINESS EXPERIENCE AND PRACTICE.

--- H. PP SHOULD ADDRESS HOW TRUCK/TRAILER PROCUREMENTS WILL BE CONDUCTED, INCLUDING WHO WILL BE PURCHASER. SER/COM ADVISES PRICES MAY BE SUBSTANTIALLY LOWER IF TRUCKS AND TRAILERS ARE PURCHASED THROUGH THEIR RESPECTIVE MANUFACTURERS AS A GROUP RATHER THAN INDIVIDUALLY.

-- I. RE AID SUPPORT REQUIREMENT (PAGE 16 OF PID), RLA SHOULD ALSO REVIEW HANDBOOK 11, IFB'S AND CONTRACTS AND RSO SHOULD ALSO REVIEW COMMODITY SPECIFICATIONS.

--- J. BUREAU ENVIRONMENTAL OFFICER (BEO) CONCURS WITH NEGATIVE DETERMINATION FOR THE PROJECT. HOWEVER, SINCE THE IEE (ANNEX E) IDENTIFIED AIR ADDITIVES, AIR POLLUTION, NOISE POLLUTION AND CHANGES IN ECONOMIC/EMPLOYMENT PATTERNS AS BEING PROJECTED TO RESULT IN LIMITED IMPACTS, THE BEO REQUESTS THAT A SHORT DISCUSSION OF THESE IMPACTS BE INCLUDED IN THE PP.

8. IN VIEW OF RECENT APPROVED LOAN REQUEST BY MALTRACO (FINANCED THROUGH MERIDIAN INT'L FUNDING CORP. AND INSURED BY EXIM BANK) FOR DOLS. 2.0 MILLION TO PURCHASE NEW MACK TRUCKS, SPARE PARTS AND OTHER EQUIPMENT AND ALSO CURRENT APPLICATION FOR DOLS. 3.0 MILLION EXIM BANK GUARANTEE FOR ADDITIONAL MACK TRUCKS, PP SHOULD DISCUSS IMPACT THESE ADDITIONAL TRUCKS WILL HAVE ON THE PROJECT AND THE TOTAL DEMAND FOR HEAVY TRUCKS IN GENERAL.

9. PP MUST BE SUBMITTED TO AID/W FOR REVIEW AND APPROVAL.
SHULTZ
DT
#5452

x 6D

Ref. No. [illegible]/21/102

11th June, 1984

FROM: SECRETARY FOR TRANSPORT AND COMMUNICATIONS, PRIVATE BAG 302, CAPITAL CITY, LILONGWE 3.

TO : THE SECRETARY TO THE TREASURY, P.O. BOX 30049, LILONGWE 3.

: THE CHIEF DEVELOPMENT OFFICER, P.O. BOX 30132, LILONGWE 3.

: THE CHIEF ECONOMIST, E.P.D. P.O. BOX 30136, LILONGWE 3.

: MR. M. BAKER, USAID, P.O. BOX 30455, LILONGWE 3.

: MR. E.V. YANCEY, DFMATT, P.O. BOX 1540, BLANTYRE.

: THE GENERAL MANAGER, INDEBANK, P.O. BOX 358, BLANTYRE.

: THE PRINCIPAL, POLYTECHNIC, P/BAG 303, CHICHIRI, BLANTYRE 3.

MALAWI COMMERCIAL TRANSPORT PROJECT

Please find attached minutes of the meeting held on 6th June, 1984 in the conference room of this Ministry concerning the proposed Malawi Commercial Transport Project.

It is hoped that Development Division found that the meeting cleared up their queries as stated in their letter DEV/11/10/Vol. 4/56 of 28th May. A revised project document will be prepared by USAID.

J. Russell

J. Russell
For: SECRETARY FOR TRANSPORT AND COMMUNICATIONS

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RECORD OF MEETING ON COMMERCIAL TRANSPORT PROJECT

Present:

F.B. Mbuta	Ministry of Transport and Communications Chairman
[illegible] Kudzeli	Ministry of Transport and Communications
[illegible] Kaunda	Ministry of Transport and Communications
H.W. Vanvey	DEMATT
H. Mononga	Treasury
F.H. Sikwese	Development Division
C. Chilingulo	INDEBANK
P. Cook	USAID
M. Baker	USAID

The Chairman opened the meeting by welcoming everyone. He went on to say that the purpose of the meeting was to review the USAID Commercial Transport Project. Since the background of the project was known to everybody present, he asked the USAID team to give a summary of the project document.

USAID pointed out that it had had discussion with all the relevant institutions in the country and that the purpose of the meeting was to find out if everybody now understands the project and if there were any comments or observations. The Project Paper covers three aspects viz:

(a) Training in the transport industry, RTD and Ministry of Transport and Communications

(b) Equipment -trucks, computer and vehicle inspection and

(c) Technical assistance at various levels. Comments were then invited from the members.

As regards training for the transport section of Ministry of Transport and Communications, USAID was asked to consider increasing this component in view of need to train more people in this section. In reply the team pointed out that there is a contingency element which could be used for this purpose. It was also agreed that it was too early to specify who is to take advantage of this component so we should leave it flexible.

Local contributions of for example 1.8 million are not cash payment as such but reflect government's effort in order to develop the transport industry by giving a guarantee in respect of the acquisition of trucks by Press Transport and using West German aid for trucks. Other contributions will be in kind. Ministry of Transport and Communications was however asked to check with Treasury p[illegible] as regards the Press Transport Guarantee.

As regards the management of the fund/trucks INDEBANK's

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[illegible] that they would first be a managing agency [illegible] whilst ownership of trucks would [illegible] Government. After some discussion it was agreed that Government would lend the funds to Indebank at an interest rate to be agreed and in turn Indebank will have truck ownership and on-lend at a rate of 15%. An agreement is to be negotiated between Indebank and Government. Transport operators will acquire the trucks under normal commercial terms [illegible] duty etc. will be in the price paid. USAID would like the duty paid to be part of the special account and not passed to Treasury. This issue is to be taken up with Treasury. The duty element could not be paid on purchase in any event in view of the credit terms. The special account for further transport investments is the repayment of principal (and duty) plus interest to Government.

The funds for this project will be controlled by Ministry of Transport and Communications while USAID will have veto power as to how the funds are actually to be used.

The vehicles for the technical assistants could be purchased locally.

The Principal Transport Officer will be the project director. USAID indicated that it may be possible for the project to fund an assistant for the project director. Ministry of Transport and Communications were very anxious to obtain this in view of the transport department workload. Dematt was asked to advise Ministry of Transport and Communications the level of the nominal fee to be paid by the trainees. It was also agreed that in the event of excess capacity training facilities will also be extended to domestic operaters.

USAID explained that projected use of the special account in future is purely indicative for their management. It is in no way binding. Also procurement from the special account is not tied in any way.

Mr. Cook then presented an implementation timetable which is to be added to the project document. Detailed discussion resulted in several amendments, and a final version was to be distributed for approval shortly. In particular it became clear that several tasks needed action immediately, before the project is actually approved by Washington, for example negotiations between Indebank and Government and defining criteria for selection of candidates to benefit from the project. In addition several others must commence before the technical assistance personnel arrive. USAID indicated that they may be able to assist in these tasks.

The technical assistance was envisaged as a contract with a consulting company for the T.C.A., S.T.O. and possibly some of the short term assistance. For cost control purposes Mr. Baker advised local or other developing country personnel could be used wherever possible on such short term work. The project director should process such requests to ensure costs are being kept down.

For the Principal Transport Adviser a contract with Mr. Gallagher is envisaged. This can be either a host country or USAID contract. The latter spares Government the

administration involved but gives USAID a veto over the experts activities. Ministry of Transport and Communications are to advise which they prefer.

Ministry of Transport and Communications is to take the initiative on guidelines for selecting candidates. It will circulate a proposal to Indebank and Demott and arrange a meeting for discussion.

It was noted that some personnel must be trained and ready for duties by the time the trucks are ready (after tendering, ordering, delivering and local assembly).

If accommodation is needed for short training sessions in Lilongwe Ministry of Transport and Communications will assist in locating suitable premises.

With respect to the job description the general point was made that each must specify that the expert is under Ministry of Transport and Communications control, and allow some flexibility for Ministry of Transport and Communications in directing their activities. The STO job description was to be substantially revised.

It was agreed that adequate maintenance and spare parts facilities in Malawi was to be a pre condition for equipment tenders. The weighting system for evaluation of tenders only comes into consideration if pre-conditions are met.

Having reviewed all documents the meeting closed with thanks to all participants. USAID will prepare a further draft for approval. It is hoped Washington will approve the project during August this year.

MINISTRY OF TRANSPORT AND COMMUNICATIONS

8th June, 1984

ANNEX B
LOGICAL FRAMEWORK MATRIX

ANNEX B

PROJECT DESIGN SUMMARY

LOGICAL FRAMEWORK

Project Title and Number: Malawi Commercial Transport - 0218

Life of Project: 3 years

From FY1985 To FY1988

Total U.S. Funding: 5.0 million

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
A. Program or Sector Goals			
1. Increase Agricultural Productivity and Exports	1. Agricultural yields and amount of exports	1. MOA and customs statistics	1. Use of additional fertilizer will increase productivity, and both fertilizer and exports would be stranded without the project.
2. Increase Rural Income and Welfare of Rural Inhabitants	2. Lower prices for fertilizer and higher prices to farmers for export crops	2. ADMARC statistics, Optichem data	2. Transport cost reductions are passed on to ADMARC and Optichem and then to farmers
3. Increase Regional Trade during Transport Crisis	3. Amount of Regional Trade	3. Customs Data and Traffic Data Collected by MOTC	3. Vehicles are provided in a timely manner and for international regional trade
4. Increase Malawi transport security through development of alternative routes and services	4. Number of new routes and international transport services	4. MOTC statistics on permits	4. Project will encourage transporters to enter into international transport
5. Save critical Malawian foreign exchange by reducing transport costs and increasing Malawi's share of the industry	5. Amount of Foreign Exchange spent on foreign transport	5. MITCO, ADMARC and other freight data collected by MOTC	5. Project transporters will displace foreign transporters and operate efficiently.

ANNEX B

PROJECT DESIGN SUMMARY

LOGICAL FRAMEWORK

Project Title and Number: Malawi Commercial Transport - 0218

Life of Project:

From FY 1985 To FY 1988

Total U.S. Funding: 5.0 million

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
B. Project Purposes			
1. Primary Purpose: To increase Malawi's international road transport capability and security through development of the Malawian International trucking industry	1. Number of Malawi transporters and vehicles hauling agricultural exports and inputs	1. MOTC traffic and vehicle registration data and arrange hauled	1. Same as A3, 4 and 5 above
2. Secondary Purpose: To provide both short and medium term support to Malawi's training institutions and to the MOTC's emergency planning and inspection programs.	2. Lower transport costs overall, and lower transport rates on international routes	2. Same as A5	2. Same as A5 and also that MOTC will continue to respond effectively to the transport crisis
	3. Same as A5	3. Same as A5	3. Same as A5
	4. Transport trainig programs estalished at DEMATT, the Polytechnic and/in dealer or transporter organizations	4. Number of courses, instructors and students enrolled, on site visits by training coordinator	4. DEMATT and Polytechnic implement programs as described. Training is specified and implemented with equipment procurement Sufficient MOTC staff is available for training.

ANNEX B

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LOGICAL FRAMEWORK

Project Title and Number: Malawi Commercial Transport - 0218

Life of Project: 3 years

From FY 1985 to FY 1988

Total U.S. Funding: 5.0 mil

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
C. Project Outputs			
1. Efficient management in MOTC on-the-job training of MOTC staff, and	1. Continued performance of transport task force management and planning, improvement of data systems, increased skills of MOTC staff	1. Policy working papers generated and participation of technical assistant in transport task force management and planning policy Data systems computerized. Before and after assessment of MOTC staff skills.	1. MOTC supports data entry into systems
2. Trained transporter owner operators, and internationally qualified drivers	2. Number of owner operators trained by DEMATT, Number of owners attending Polytechnic courses, number of certified drivers	2. DEMATT, Polytechnic and Road Traffic Commission certified records	2. Certification is established by MOTC
3. Well-equipped Malawian transporters engaged in international transport	3. Project equipment is used by Malawian transporters for the hauling international shipments	3. Number of vehicle trips and tons hauled by project vehicles from MOTC traffic records	3. INDEBANK procurement is timely and successful
4. Special training programs established for Malawian transporters and drivers.	4. Same as B4	4. Same as B4	4. Same as B4

ANNEX C
STATUTORY CHECKLIST

ANNEX C

STATUTORY CHECKLIST
(Malawi FY-84)

Malawi Commercial Transport Project
612-0218

COUNTRY CHECKLIST

A. General Criteria for Country Eligibility.

1. FAA Sec. 481. Has it been determined that the government of the recipient country has failed to take adequate steps to prevent narcotic drugs and other controlled substances (as defined by the Comprehensive Drug Abuse
Prevention and Control Act of 1970) produced or processed, in whole or in part, in such country, or transported through such country, from being sold illegally within the jurisdiction of such country, to U.S. Government personnel or their dependents, or from entering the U.S. unlawfully?

Such a determination has not been made

2. FAA Sec. 620(c). If assistance is to a government, is the government liable as debtor or unconditional guarantor on any debt to a U.S. citizen for goods or services furnished or ordered where (a) such citizen has exhausted available legal remedies and (b) the debt is not denied or contested by such government?

The Government of Malawi is not in such a position of a liability to a US citizen

3. FAA Sec. 620(e) (1). If asssistance is to a government, has it (including government agencies or subdivisions) taken any action which has the effect of nationalizing, expropriating
or otherwise seizing ownership or control of property of U.S. citizens or entities beneficially owned by them without taking steps to discharge its obligations toward such citizens or entities?

Neither Government of Malawi nor its agencies and subdivisions has taken such actions

4. FAA Sec. 532(c), 620(a), 620(f), 620D; FY 1982 Appropriation Act Secs. 512 and 513. Is recipient country a Communist country? Will assistance be provided to Angola, Cambodia, Cuba, Laos, Vietnam, Syria, Lybia, Iraq, or South Yemen? Will assistance be provided to Afghanistan or Mozambique without a waiver?

NO

X

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5 ISDCA of 1981 Secs. 724, 727, 728 and 730. For specific restrictions on assistance to Nicaragua, see Sec. 724 of the ISDCA of 1981. For specific restrictions on assistance to El Salvador, see Secs. 727, 728 and 730 of the ISDCA of 1981.

N/A

6. FAA Sec. 620(j). Has the country permitted, or failed to take adequate measures to prevent, the damage or destruction by mob action of U.S. property.

NO

7. FAA Sec. 620(k). Does the program furnish assistance in excess of $100,000,000 for the construction of a productive enterprise, except for productive enterprises in Egypt that were described in the Congressional Presentation materials?

NO

8. FAA Sec. 620(l). Has the country failed to enter into an agreement with OPIC?

NO

9. FAA Sec. 620(o); Fishermen's Protective Act of 1967, as amended, Sec. 5. (a) Has the country seized, or imposed any penalty or sanction against, any U.S. fishing activities in international waters?
(b) If so, has any deduction required by the Fishermen's Protective Act been made?

NO

10. FAA Sec. 620(q); FY 1982 Appropriation Act Sec. 517. (a) Has the government of the recipient country been in default for more than six months on interest or principal of any AID loan to the country? (b) Has the country been in default for more than one year on interest or principal on any U.S. loan under a program for which the appropriation bill appropriates funds.

NO

11. FAA Sec 620(s). If contemplated assistance is development loan or from Economic Support Fund, has the Administrator taken into account the amount of foreign exchange or other resources which the country has spent on military equipment? Reference may be made to the annual "Taking into Consideration" memo: "Yes, taken into account by the Administrator at time of approval of Agency OYB." This approval by the Administrator of the Operational Year Budget can be the basis for an affirmative answer during the fiscal year unless significant changes in circumstances occur.

N/A

12. FAA Sec. 620(t). Has the country severed diplomatic relations with the United States? If so, have they been resumed and have new bilateral assistance agreements been negotiated and entered into since such resumption?

NO

13. FAA Sec. 620(u). What is the payment status of the country's U.N. obligations? If the country is in arrears, were such arrearages taken into account by the AID Administrator in determining the current AID Operational Year Budget?

Government of Malawi is not in arrears in payments to the U.N.

14. FAA Sec. 620A; FY 1982 Appropriation Act Sec. 520. Has the country aided or abetted, by granting sanctuary from prosecution to, any individual or group which has committed an act of international terrorism? Has the country aided or abetted, by granting sanctuary from prosecution to, any individual or group which has committed a war crime?

NO

15. FAA Sec. 666. Does the country object, on the basis of race, religion, national origin or sex, to the presence of any officer or employee of the U.S. who is present in such country to carry out economic development programs under the FAA?

NO

16. FAA Sec. 666. Has the country, after August 3, 1977, delivered or received nuclear enrichment or reprocessing equipment, materials, or technology, without specified arrangements or safeguards? Has it transferred a nuclear explosive device, after August 3, 1977? (FAA Sec. 620E permits a special waiver of Sec. 669 for Pakistan.)

NO

17. FAA Sec. 720. Was the country represented at the Meeting of Ministers of Foreign Affairs and Heads of Delegations of the Non-Aligned Countries to the 36th General Session of the General Assembly of the U.N. of Sept. 25 and 28, 1918, and failed to disassociate itself from the communique issued? If so, has the President taken it into account?

Malawi has disassociated itself with issued communique.

18. FAA Sec. 721. See special requirements for assistance to Haiti.

N/A

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B. FUNDING SOURCE CRITERIA FOR COUNTRY ELIGIBILITY

1. Development Assistance Country Criteria.

a. FAA Sec. 116. Has the Department of State determined that this government has engaged in a consistent pattern of gross violations of internationally recognised human rights? If so, can it be demonstrated that contemplated assistance will directly benefit the needy?

NO

2. Economic Support Fund Country Criteria

a. FAA Sec.502B. Has it been demonstrated that the country has engaged in a consistent pattern of gross violations of internationally recognised human rights? If so, has the country made such significant improvements in its human rights record that furnishing such assistance is in the national interest?

N/A

b. FAA Sec.620B. If ESF is to be furnished to Argentina, has the President certified that (1) the Govt. of Argentina has made significant progress in human rights; and (2) that the provision of such assistance is in the national interests of the U.S.?

N/A

c. ISDCA of 1981, Sec.726(b). If ESF assistance is to be furnished to Chile, has the President certified that (1) the Govt. of Chile, has made significant progress in human rights; (2) it is in the national interest of the U.S.; and (3) the Govt. of Chile is not aiding international terrorism and has taken steps to bring to justice those indicted in connection with the murder of Orlando Letelier?

N/A

5C(2) PROJECT CHECKLIST

Listed below are statutory criteria applicable generally to projects under the FAA and project criteria applicable to individual funding sources: Development Assistance (with a subcategory for criteria applicable only to loans); and Economic Support Funds.

CROSS REFERENCES: IS COUNTRY CHECKLIST UP TO DATE? HAS STANDARD ITEM CHECKLIST BEEN REVIEWED FOR THIS PROJECT.

A GENERAL CRITERIA FOR PROJECT

1. FY 1982 Appropriation Act Sec. 523; FAA Sec. 653(b).

(a) Describe how authorising and appropriations committees of Senate and House have been or will be notified concerning the project;
(b) is assistance within (Operational Year Budget) country or international organization allocation reported to Congress (or not more than $1 million over that amount)?

CN required
CN submitted on _____,
and expired on _____.

2. FAA Sec. 611(a)(1). Prior to obligation in excess of $100,000, will there be (a) engineering, financial or other plans necessary to carry out the assistance and (b) a reasonably firm estimate of the cost of the U.S. of the assistance?

No construction planned.

3. FAA Sec. 611(a)(2). If further legislative action is required within recipient country, what is the basis for reasonable expectation that such action will be completed in time to permit orderly accomplishment of purpose of the assistance?

No legislative action required.

4. FAA Sec. 611(b); FY 1982 Appropriation Act Sec. 501. If for water or water-related land resource construction, has project met the standards and criteria as set forth in the Principles and Standards for Planning Water and Related Land Resources, dated October 25, 1973?

N/A

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

Capital Equipment exceeding a value of $1 million will be provided by Project. Mission Director has certified that adequate service and maintenance facilities exist.

6. FAA Sec. 209. Is project susceptible to execution as part of regional or multilateral project? If so, why is project not so executed? Information and conclusion whether assistance will encourage regional development programs.

No, Project objectives are to develop national capability. Project will have favorable impact on promoting greater regional trade.

7. FAA Sec. 601(a). Information and conclusions whether project will encourage efforts of the country to: (a) increase the flow of international trade; (b) foster private initiative and competition; and (c) encourage development and use of cooperatives, and 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.

a) Yes
b) Yes
c) No
d) Yes
e) Yes
f) No

8. 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).

An estimated $2.5 million of U.S. manufactured trucks and related transport equipment will be provided. Technical Assistance Contract ($ 1.3 Million) will be with U.S. firm.

9. FAA Sec. 612(b), 636(h); FY 1982 Appropriation Act Sec.507. 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 utilised in lieu of dollars.

To the extent feasible, GOM will provide housing and office space to U.S. Technical Assistance.

10. 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.

11. FAA Sec. 601(e) Will the project utilize competition selection procedures for the awarding of contracts, except where applicable procurement rules allow otherwise?

Yes.

12. FY 1982 Appropriation Act Sec.521. 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 substancial injury to U.S. producers of the same, similar competing commodity?

Project Assistance is not for the production of any specific commodity for export by Malawi.

13. FAA 118(c) and (d). Does the project take into account the impact on the environment and natural resources? If the project or program will significantly affect the global commons or the U.S. environment, has an environmental impact impact statement been prepared? If the project or program will significantly affect the environment of a foreign country, has an environmental assessment been prepared? Does the project or program take into consideration the problem of the destruction of tropical forests?

Yes (See IEE)

14. FAA 121(d). If a Sahel project, has a determination been made that the host government has an adequate system for accounting for and controlling receipt and expenditure of project funds (dollars or local currency generated therefrom)?

N/A

B FUNDING CRITERIA FOR PROJECT

1. Development Assistance Project Criteria

a. FAA Sec. 102(b), 111, 113, 281(a). 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, spreading investment out from cities to small towns and rural

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areas, and insuring wide participation of the poor in the benefits of development on a sustained basis,using the appropriate U.S. institutions; (b) 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; (c)support the self-help efforts of developing countries; (d) promote the participation of women in the national economies of developing countries and the improvement of women's status; and (e) utilize and encourage regional cooperation by developing countries?

a) Project will ease transport bottlenecks encountered by smallholders in marketing output and in obtaining production inputs such as fertilizer.
b) Project assistance specifically targeted toward owner/operators rather than large trucking concerns.
c) Project will support development of national trucking industry.
d) Little expected impact.
e) Project will support regional cooperation in resolving regional transport difficulties

b. FAA Sec. 103, 103A, 104, 105, 106. Does the project fit the criteria for the type of funds (functional account) being used?

Section 106; yes

c. FAA Sec. 107. Is emphasis on use of appropriate technology (relatively smaller, cost-saving, labor-using technologies that are generally most appropriate for the small farms, small businesses, and small incomes of the poor)?

Yes, to the extent possible. The transport equipment to be procured by the project is judged to be the most appropriate type to serve its intended function and the conditions existing in Malawi.

d. FAA Sec. 110(a). Will the recipient country provide at least 25% 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.

e. FAA Sec. 110(b). Will grant capital assistance be disbursed for project over more than 3 years? If so, has justification satisfactory to congress been made, and efforts for other financing, or is the recipient country "relatively least developed"?

Capital assistance (heavy equipment) will be procured during initial year of project. Recipient country is also "relatively least developed".

f. FAA Sec. 122(b). Does the activity give reasonable promise of contributing to the development of economic resources, or to increase of productive capacities and self-sustaining economic growth?

Yes.

g. FAA Sec. 281(b). Describe extent to which program recognises the particular needs, desires, and capacities of the people of the country; utilises the country's intellectual resources to encourage institutional development; and supports civil education and training in skills required for effective participation in governmental processes essential to self-government.

The principal organizations involved in the implementation of the project are Malawian. The sizeable training component of the projects uses and supports a wide range of educational insitutions including several private sector institutions.

2. Development Assistance Project Criteria (Loans Only).

a. 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. 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% of the enterprise's annual production during the life of the loan?

N/A

c. ISDCA of 1981, Sec. 724(c) and (d). If for Nicaragua, does the loan agreement require that the funds be used to the maximum extent possible for the private sector? Does the project privide for monitoring under FAA Sec. 624(g)?

N/A

3. Project Criteria Solely for Economic Support Fund

a. FAA Sec. 531(a). Will this assistance promote economic or political stability? To the extent possible , does it reflect the policy directions of FAA Section 102?

N/A

b. FAA Sec. 531(c). Will assistance under this chapter be used for military, or paramilitary activities?

N/A

c. FAA Sec. 534. Will ESF funds be used to finance the construction of the operation or maintenance of, or the supplying of fuel for, a nuclear facility? If so, has the President certified that such use of funds is indispensable to nonproliferation objectives?

N/A

d. 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?

N/A

5C(3) - STANDARD ITEM CHECKLIST

Listed below are the statutory items which normally will be covered routinely in those provisions of an assistance agreement dealing with its implementation, or covered in the agreement by imposing limits on certain uses of funds.

These items are arranged under the general headings of (A) Procurement, (B) Constuction, and (C) Other Restrictions.

A. Procurement

1. FAA Sec. 602. Are there arrangements to permit U.S. small business to participate equitably in the furnishing of commodities and services financed?

Project financed contracts will follow AID contracting procedures which contain provisions for promoting small business participation.

2. FAA Sec. 604(a). Will all procurement be from the U.S. except as otherwise determined by the President or under delegation from him?

Yes.

3. 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?

Malawi does not descriminate against U.S. marine insurance companies.

4. FAA Sec. 604(e); ISDCA of 1980 Sec. 705(a). If offshore procurement of agricultural commodity or product 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 the U.S.)

No offshore procurement of agricultural commodity or product will be financed.

5. FAA Sec.603. Is the shipping excluded from compliance with requirement in section 901(b) of the Merchant Marine Act of 1936, as amended, that at least 50 per centum 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 that such vessels are available at fair and reasonable rates?

Shipping not excluded from compliance with said requirement.

6. FAA Sec. 621. If technical assistance is financed , will such assistance be furnished by private enteprise on a contract basis to the fullest extent practicable? If the facilities of other Federal agencies will be utilized, are they particularly suitable, not competitive with private enterprise, and made available without undue interference with domestic programs?

Technical Assistance will be provided by U.S. Private Sector on a contract basis.

7. International Air Transport. 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.

8. FY 1982 Appropriation 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.

B. Construction

1. FAA Sec. 601(d). If capital (e.g., construction) project, are engineering and professional services of U.S. firms and their affiliates to be used to the maximum extent consistent with the national interests?

N/A

2. 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

3. 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?

N/A

C. Other Restrictions

1. FAA Sec. 122(b). If development loan, is interest rate at least 2% per annum during grace period and at least 3% per annum thereafter?

N/A

2. 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

3. FAA Sec. 620(h). Do arrangements exist to ensure that United States foreign aid is not used in 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.

4. Will arrangements preclude use of financing:

a. FAA Sec. 104(f); FY 1982 Appropriation Act Sec. 525: (1) To pay for performance of abortions as a method of family planning or to motivate or coerce persons to practice abortions; (2) to pay for performance of involuntary sterilization as method of family planning, or to coerce or provide financial incentive to any person to undergo sterilization; (3) to pay for any biomedical research which relates, in whole or in part, to
methods or the performance of abortions or involuntary sterilizations as a means of family planning; (4) to lobby for abortion?

1. Yes
2. Yes
3. Yes
4. Yes

b. FAA Sec.620(g). To compensate owners for expropriated nationalized property?

Yes.

c. FAA Sec. 660. To provide training or advice or provide any financial support for police, prisons, or other law enforcement forces, except for narcotics programs?

Yes.

d. FAA Sec. 662. For CIA activities?

Yes.

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e. FAA Sec. 636(i). For purchase, sale, long-term lease, exchange or guaranty of the sale of motor vehicles manufactured outside U.S., unless a waiver is obtained?

Yes.

f. FY 1982 Appropriation Act, Sec. 503. To pay pensions, annuities, retirement pay, or adjusted service compensation for military personnel?

Yes.

g. FY 1982 Appropriation Act, Sec. 505. To pay U.N. assessments, arrearages or dues?

Yes.

h. FY 1982 Appropriation Act, Sec. 506. To carry out provisions of FAA section 209(d) (Transfer of FAA funds to multilateral organizations for lending)?

Yes.

i. FY 1982 Appropriation Act, Sec. 510. To finance the export of nuclear equipment, fuel, or technology or to train foreign nationals in nuclear fields?

Yes.

j. FY 1982 Appropriation Act, Sec. 511. Will assistance be provided 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?

No.

k. FY 1982 Appropriation Act, Sec. 515. To be used for publicity or propaganda purposes within U.S. not authorised by Congress?

Project will preclude such uses of assistance.

ANNEX E

611(e) CERTIFICATION

TO: AA/AFR, Mark Edelman

FROM: Sheldon W. Cole
AID Representative, USAID/Malawi

SUBJECT: 611(e) Certification for the Malawi Commercial Transport Project

Section 611(e) of the FAA, requires the principal AID Officer to certify that the host country can use and maintain capital assistance exceeding $1 million. The proposed Malawi Commercial Transport Project (612-0218) contains financing for the procurement of large trucks, trailers and spare parts having an estimated value of $2.5 million. AID financing for this capital equipment will be channeled through a Malawian development bank (INDEBANK) at commercial terms to private sector transport firms.

The design of the project has taken into consideration several factors pertaining to the intent of 611(e) of the FAA as summarized below.

1. An analysis of the number of large trucks needed by the Malawi international trucking industry under different scenarios clearly indicates that in any case the number of vehicles supplied by the project is well within the size of fleet required to handle Malawi's external trade flows. (See Annex F8).

2. An analysis of the profitability of the international road haulage industry indicates an adequate level of return on investment for efficiently operated transport concerns. (See Annex F8).

3. The conditions required by INDEBANK prior to approving a loan to a Malawian transporter will insure that the borrower has adequate technical managerial expertise, access to vehicle maintenance and repair facilities and has developed business arrangements to utilize the investment profitably. (See Annex F5).

Previous project experience in Malawi has been limited to the Government of Malawi's capability to use and maintain capital investments which have largely been the construction of physical plants (Polytechnic and Bunda Colleges) and highways (Lilongwe-Mchinji road, Chikwawa-Bangula road and lower lake shore road). These previous capital investments have been correctly used and maintained.

Based on the design of this project and previous experience in Malawi with sizeable capital investments, I certify that in my judgement, the Cooperating Country has the financial and human resources capabilities to effectively maintain and utilize the capital assistance to be provided by this project.

ANNEX D
GOM REQUEST FOR ASSISTANCE

ANNEX E

PROJECT AUTHORIZATION

PROJECT AUTHORIZATION

Name of Country: Malawi

Name of Project: Malawi Commercial Transport Project

Number of Project: 612-0218

1. Pursuant to Section 106 of the Foreign Assistance Act of 1961, as amended, I hereby authorize the Commercial Transport Project for Malawi involving planned obligations of not to exceed Five Million Two Hundred Thousand United States Dollars ($5,200,000) in grant funds over a two year period from date of authorization subject to the availability of funds in accordance with the A.I.D. OYB/allotment process to help in financing foreign exchange and local currency costs for the project. The planned life of the Project is three years.

2. The Project will assist the Cooperating Country to develop its international trucking industry. To carry out the objectives of the Project, A.I.D. will provide financing for training, technical assistance, equipment, including vehicles, and commodities.

3. The Project Agreement which may be negotiated and executed by the officer to whom such authority is delegated in accordance with A.I.D. regulations and Delegations of Authority shall be subject to the following essential terms, covenants and major conditions, together with such other terms and conditions as A.I.D. may deem appropriate.

4. a. Source and Origin of Commodities, Nationality of Services

Commodities financed by A.I.D. under the Project shall have their source and origin in the Cooperating Country, the United States. or in countries included in A.I.D. Geographic Code 941, of commodities or services, including ocean shipping, shall have the Cooperating Country, United States, or countries included in A.I.D. Geographic Code 941 as their place of nationality except as A.I.D. may otherwise agree in writing.

b. Conditions Precedent to Disbursement

(1) Prior to the initial disbursement of Project funds, the Cooperating Country shall furnish, in form and substance satisfactory to A.I.D., the name and specimen signature of the individual designated as Project Director for the Project.

(2) Prior to the disbursement of Project funds for financing of transport equipment, the Cooperating Country shall furnish, in form and substance satisfactory to A.I.D.:

(i) An executed loan agreement between the Government of Malawi and INDEBANK governing the use and repayment of Project credit funds used for the procurement of heavy trucks, trailers, and spare parts. The Agreement shall contain the essential terms specified on page twelve of the A.I.D. Project Paper, including reversion of the unused risk coverage funds to the Special Account.

(ii) Evidence that the Government has established a Special Account into which INDEBANK will deposit loan repayments, both principal and eight percent interest, to the Government, for the loan to INDEBANK for the purchase of heavy transport equipment. This shall include the guidelines governing the management and use of the funds in the Special Account.

c. Covenants

(1) The Government of Malawi agrees expeditiously to process the applications for road service permits submitted by Malawian transporters, especially those participating in the credit and training elements of the Project.

(2) The Government of Malawi agrees that the issuance of road service permits and licenses shall be conducted in a manner insuring, (a) equal access to all Malawian citizens, and (b) the development of a competitive and efficient national capacity for international road haulage.

(3) The Government of Malawi agrees to provide adequate personnel in support of the Ministry of Transport and Communications (MOTC) emergency transport planning and monitoring function and for the international transport inspection and licensing function of the Road Traffic Commissioner's Office (RTC).

(4) The Government of Malawi agrees to provide suitable housing, office space, and support staff for the Project-financed long-term technical assistance team.

(5) The Government of Malawi agrees to take responsibility for the implementation steps specified in Table 6 of the A.I.D. Project Paper (attachment to grant agreement as Annex 3) as MOTC, RTC, or Ministry of Finance responsibility, and will make all possible effort to maintain the schedule in that table.

Date: _____

Assistant Administrator
for Africa

ANNEX F 1

SUMMARY DESCRIPTION OF THE MALAWI ROAD TRANSPORT SECTOR

The following pages summarize selected analyses and conclusions of the Malawi Transport Sector Assessment, prepared by Louis Berger International, Inc. under USAID funding in September 1983. Certain tables and analyses have been updated where more recent data is available, but the conclusions remain valid.

SUMMARY DESCRIPTION OF THE MALAWI ROAD TRANSPORT SECTOR

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A. TRANSPORTATION LINKS AND FACILITIES

1. Road, Rail and Lake Transportation Links

Transportation links within the Republic of Malawi are provided by a road network of approximately 10,000 kms of which about one fifth is paved, a rail network of approximately 800 km of single line track, one international airport at Lilongwe and Lake Malawi which provides a potential north/south lake corridor approximately 500 kms in length. (See Figure 1)

a. Roads

The trunk road network totals approximately 2500 km of which over half is paved. The majority of the paved roads are in the southern half of the country. The main north-south axis road Bangula-Chikwawa-Blantyre-Zomba-Dedza-Lilongwe-Kasungu-Jenda is paved however certain sections are in poor condition. This connects with the Mzuzu-Karonga road which is paved, however the connecting section from Jenda-Luwawa-Mozamba-Mbowe-Mzuzu which is in difficult terrain is not fully paved. A connecting road to be paved to link with the Tanzania border so as to complete the overall north-south corridor is currently under discussion.

To the south and east paved roads connect with Mozambique at Bangula and Mwloza. To the west, a new connection to Zimbabwe via Mozabique from Lilongwe to Mwanza is scheduled to be built whilst a paved road connects with the Zambian border further north at Mchinji.

The critical missing links therefore in the road network are a section of the M1 between Jenda and Mzuzu which requires paving, and the connecting link which requires construction to connect with the Tanzanian border in the north.

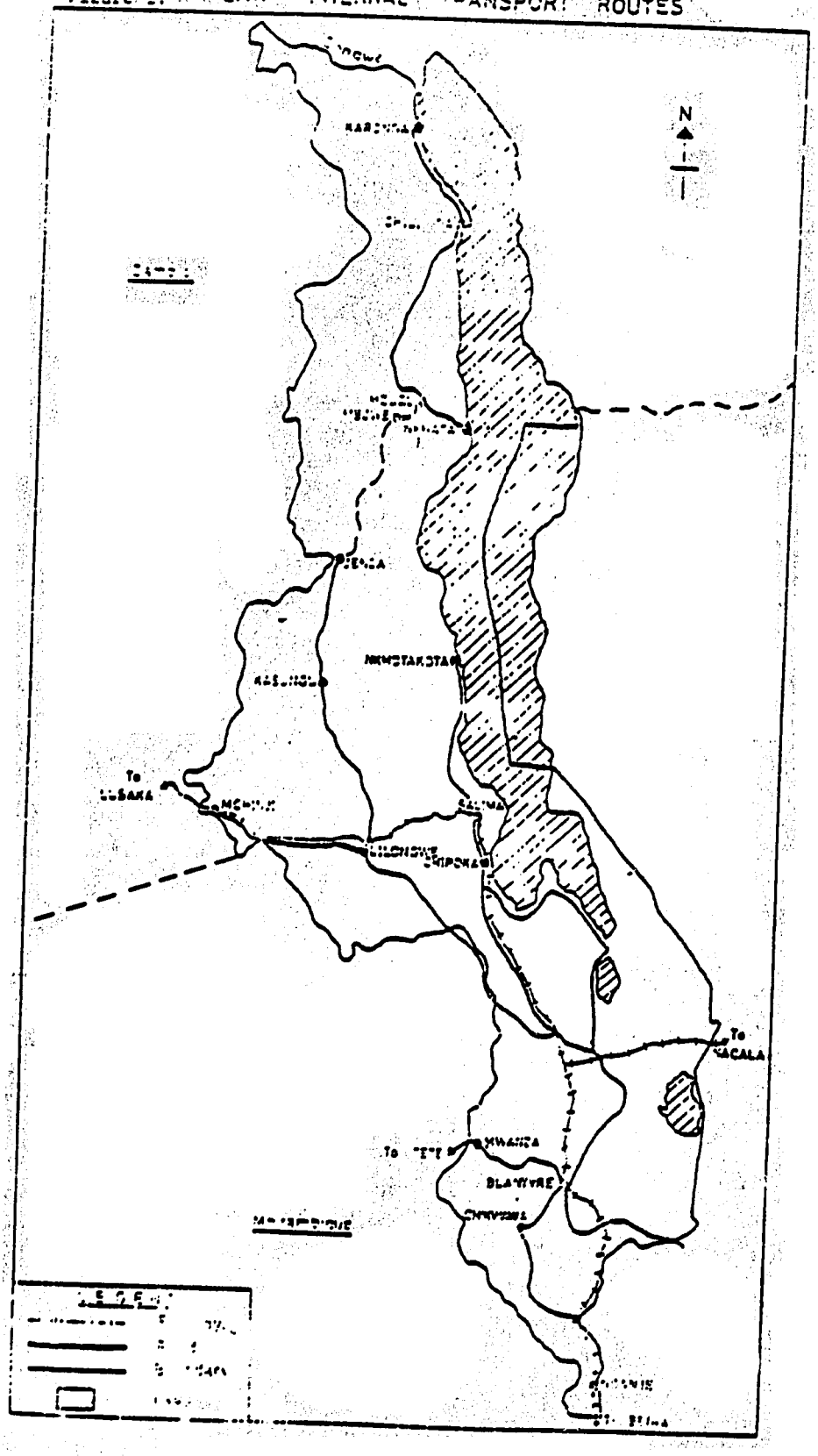
b. Rail

Malawi Railways has a single line rail network with two branches which connect with Mozambique at Nsanje and Nayuchi. The former links with the Mozambican 'Caminhos de Ferro' line to Beira whilst the latter connects with the port of Nacala. These two lines meet at Nkaya and link with both Blantyre and Lilongwe. The last section of rail line to be constructed recently connects Lilongwe with the Zambia Border at Mchinji which will then connect with Chipata in Zambia. The rail network also connects with the lake services at the port of Chipoka.

c. Lake

Lake Malawi has traditionally been used to provide some passenger and freight services, although volumes are fairly low. There are small ports at Monkey Bay, Chipoka, Nkhata Bay and Chilumba. Most activity occurs at Chipoka where the railway connects with the port.

Figure 1. MALAWI INTERNAL TRANSPORT ROUTES



d. International Transport Corridors

Due to its landlocked position Malawi is dependent on international transport corridors in neighboring countries for the import and export of commodities. The following outlines the routes which connect with principal seaports. (See Figure 2) These are the main transit transportation links for the Republic of Malawi. There are essentially six routes which are available. These are:

1. Rail to Beira
2. Rail to Nacala
3. Road via Tete and Harare to Durban
4. Road via Lusaka and road or rail via Gaborone to Durban
5. Road via Lusaka and road or rail via Tanzania to Dar es Salaam
6. Road via Lusaka and road or rail via Tanzania

The seventh option depends on opening up the northern road link into Tanzania in the future. (See Section II.B)

2. Road, Rail and Port Facilities

The previous section has outlined the principal international transport routes upon which Malawi is dependent. The following highlights the infrastructure and facilities on each of the main routes.

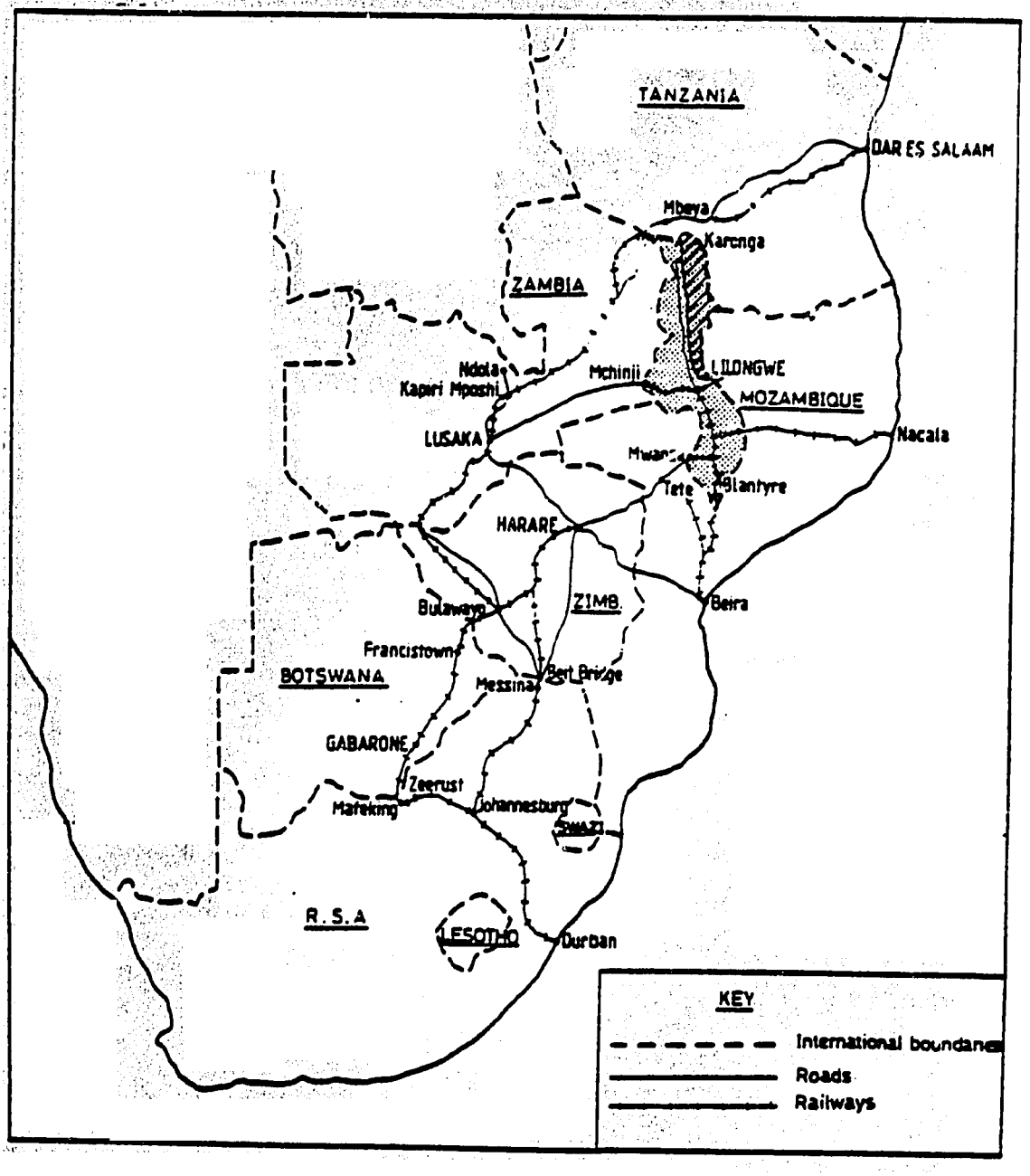
a. Nsanje-Beira (Rail)

This is the shortest distance to the coast and consists of a single line track, sections of which are badly deteriorated. The line which previously served as the vital link for Malawi is currently virtually closed due to insurgency in the region. The port of Beira can receive ships up to 25,000 t.dwt. and can handle bulk and break-bulk cargoes, Ro-Ro traffic, fuel and coal. Cranes and handling facilities are adequate and transit cargo storage of up to 60,000 m^2 is available.

b. Nayuchi-Nacala (Rail)

This is a single line track, sections of which are poorly constructed and maintained which leads to problems during the rainy season. There is a rehabilitation program which is due to be implemented shortly. Communications on the line are poor if not non-existent. Nacala is a deep seaport with good access. There are four conventional shipping berths and two container berths. There are facilities for POL and facilities for transferring containers directly between ships and wagons and a large rail mounted gantry.

Figure 2. INTERNATIONAL TRANSPORT ROUTES



Handling facilities are good and covered transit cargo storage of 24,000 m^2 is available. However, the ground at the container terminal is not paved which leads to handling difficulties during the rainy season.

c. Mwanza-Tete-Harare road/Harare-Beit Bridge-Messina-Durban rail

A new paved road is scheduled to be built between Lilongwe and Mwanza. In Malawi the present road from Blantyre to Mwanza is gravel and in poor condition. Over the border in Mozambique the road is paved but badly deteriorated up to Tete and has been subject to insurgency. The bridge at Tete has occasionally been closed. If this occurs, of it insurgents prevent using this route, this necessitates using the alternative longer road route to Harare via Lusaka. The road section in Zimbabwe from Harare to Beit Bridge is paved and good.

d. (i) Mchinji-Lusaka road/Lusaka-Chirundu-Harare road/Harare-Beit Bridge-Messina-Johannesburg-Durban rail

This is a paved road, sections of which need reconstruction on the section from Lusaka to Harare. At Harare transhipment facilities for containers exist but require expansion. In Zimbabwe the National Railways of Zimbabwe (NRZ) presently operates diesel locomotives but this section first to Sombula and then through to Beit Bridge is being electrified. In South Africa the rail route passes via Pretoria from Messina to Durban. Parts of this are electrified.

(ii) Mchinji-Lusaka road/Lusaka-Harare-Beit Bridge road/Beit Bridge-Messina-Johannesburg-Durban rail

The alternative to the above route is by road all the way through Zimbabwe via Harare to Beit Bridge to the South African border, and to tranship at Messina onto the South Africa rail system. The paved road is good and good warehousing and transhipment facilities exist at Messina.

e. (i) Mchinji-Lusaka road/Lusaka-Livingstone-Bulawayo -Gaborone-Mafeking-Durban rail

This is a paved road to Lusaka, parts of which are poorly maintained and badly deteriorated in Zambia. Lusaka road/rail transhipment facilities are warehousing are available. Container handling facilities are available but require improvement. Zambian Railways (Z.R.) serves the route to Victoria Falls bridge where the National Railways of Zimbabwe (NRZ) takes over. Sections of the Zambian railway are scheduled for improvement under a IBRD investment program. In Zimbabwe steam locomotives are used up to Victoria Falls as it runs through the Wankie coal producing area. From Victoria Falls to Bulawayo and on to the Botswana border, and in Botswana itself after Francistown for 640 kms, the railway is operated by NRZ. The Botswana Government plans to take this over in 1987.

In South Africa the railway is operated by South African Transport Services (S.A.T.S.) from the Botswana border via Mafeking, Zeerust and Johannesburg to Durban (1047 kms). This is part diesel oerated and part electric. Services are good. At the port of Durban ships up to 80,000 t.dwt. can be handled and 59 berths are available for bulk, break-bulk, containers, Ro-Ro and fuel cargos. Container facilities and handling facilities are good and 95,000 m^2 of covered storage space is available. S.A.T.S. owns and operates the port which facilitates cargo handling and loading onto the railway.

(ii) Mchinji-Lusaka road/Lusaka-Kazungula-Francistown Gaborone-Mafeking-Zeerust road/Zeerust-Johannesburg-Durban rail

An alternative to the above consists of a similar routing by road all the way from Lusaka to the South African border. The road from Lusaka to Kazungula is paved with some sections requiring rehabilitation. At Kazungula (where four countries meet) there is a ferry crossing. Proposals have been made to replace this by a bridge in the long term. Beyond Kazungula, in Botswana, there is a section of gravel road followed by a new section of paved road to the South African border at Mafeking. At Zeerust (in R.S.A.) there are transhipment facilities to link with the South African railway system.

f. (i) Mchinji-Lusaka road/Lusaka Dar es Salaam rail

This route consists of delivering goods by road to Lusaka, transhipping them, and then routing them via Zambian Railways to Kapiri Mposhi. Goods travel on the remaining section of this route (which is 1860 kms to Dar es Salaam) on the Tazara railway powered by diesel locomotives. This line is new but certain sections of the line are subject to landslides.

The port of Dar es Salaam is fairly modern with facilities for conventional ships and some RoRo facilities. There is a buoy for crude oil inputs which can cater for very large tankers of 100,000 t.dwt. (A crude oil pipeline connects with Ndola in Zambia). Containers must be off-loaded by ships' equipment. There is a project for developing and expanding the container facilities. Handling facilities exist but availability is often poor due to the lack of spares, fuel, etc. Additional warehousing facilities are being constructed.

(ii) Mchinji-Lusaka-Dar es Salaam road

The road to Kapiri Mposhi from Lusaka is paved and fairly heavily trafficked. Beyond Kapiri Mposhi the road is the TanZam Highway which is paved and forms part of the Trans-East African Highway. In Tanzania sections of the road are being reconstructed. Presently this road carries approximately 200,000 tonnes of international freight traffic per annum.

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g. (i) Karonga-River Songwe-Ibanda-Dar es Salaam road

In Malawi the north/south road to Karonga is paved except for a section between Jenda-Luwawa-Champhoyo which is under construction and from Champoyo to Mbowe where the road is gravel. Beyond Karonga there is a dirt road to the border at the River Songwe. There is no bridge there. On the Tanzanian side there is a gravel road to the border from Ibanda but another bridge is required to cross the river Kiwira. Beyond this there is a paved road connecting Ibanda and Mbeya which lies on the Tanzam Highway.

This overall connecting route is currently non-functional due to the lack of a border connection, but it is under study for future development and provisional plans to open up this route are underway.

(ii) Karonga-River Songwe-Ibanda-Mbeya road/Mbeya-Dar es Salaam rail

The alternative to the above route consists of road to Mbeya (once the Karonga-River Songwe-Ibanda road is completed), transhipment at Mbeya and rail (via Tazara) to Dar es Salaam. Transhipment facilities at Mbeya will need expansion.

B. THE ECONOMY AND IMPORT/EXPORT FLOWS

The Republic of Malawi is a landlocked country and has suffered significantly as a result of this in recent years. Since independence the country has attained self-sufficiency in food and produces valuable agricultural commodities for export, principally tobacco, tea and sugar, and recently maize. All vital inputs, for example, fuel, fertilizer, coal and manufactured goods have to be imported.

1. Current Levels of Imports and Exports

Table 1 summarizes the total tonnages of goods estimated for import/export to/from the country in 1984.

Table 1 Estimated Imports and Exports (tonnes) 1984

Imports		Exports	
Petrol & Parafin	55,000	Tobacco	35,000
Diesel	65,000	Tea	40,000
Fertilizer	100,000	Sugar	80,000
Coal	45,000	Maize	150,000
Manufactured Goods	100,000	Groundnuts	5,000
Others	95,000	Others	10,000
Total	460,000 t.		320,000 t.

Tea and tobacco alone contributed about K. 190 million to foreign exchange earnings in 1983, whilst maize, and sugar and groundnuts contributed approximately K. 50 million.

2. Projections of Future Imports and Exports

a. Exports

The following Table 2 indicates projections for the export of principal crops (by tonnage) over the period 1984-8. Steady growth in tea and tobacco is expected. It should be noted that the 1983 export of maize should be substantially higher than that indicated, since 200,000 tonnes was actually sold but was not all transported. Also the forecast for sugar exported is likely to be lower than that indicated due to transport constraints and is unlikely to reach 100,000 tonnes even though there is a substantial volume available ready for export. Cotton and rice are expected to constitute a small percentage of total exports.

TABLE 2

PROJECTIONS - EXPORTS OF MAJOR CROPS (1984-88

Export Sector - Exports of Major Crops

Volume (000 tonnes)	1982[a]	1983	Forecast 1984	1984	1986	1987	1988
Tea	37.2	35.0	36.4	37.9	39.5	41.1	42.8
Tobacco	44.8	49.3	48.8	54.5	59.4	63.2	67.2
Sugar	101.1	120.0[b]	120.1	118.2	116.2	114.2	112.1
Cotton	0.5	0.0	1.0	1.9	2.9	3.2	3.4
Groundnuts	7.2	7.4	10.9	15.6	21.7	29.7	40.1
Maize	50.0	60.0[c]	82.8	70.5	67.2	63.7	62.7
Rice	2.6	0.0	0.0	2.0	5.5	10.0	15.7
	243.4	271.7	300.0	300.6	312.4	325.1	344.0

Source: 1983 Economic Report - Office of the President and Cabinet

(a) Actual Data frpm N.S.O.

(b) Sucoma estimate: 70.0t

(c) ADMARC estimate 200.0t sold but not all transported

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b. Imports

With respect to imports, it has been forecast that the growth of imports is expected to be proportional to the growth in gross domestic product (G.D.P.) in the forthcoming years. For the period 1981-6 the growth in G.D.P. at factor cost has been estimated as 4% per annum, and for the period 1986-90, estimated as 5% per annum. Gradual growth in the economy is therefore expected, with a corresponding impact in terms of the volumes of principal commodities imported. Therefore import volumes are expected to start increasing at 4-5% per year, once the economy has stabilized after the impact of the transport crisis.

3. Importer and Exporter Response to the Transport Crisis

The actions of major transport users for coping with the transport problems may be grouped according to three categories of shippers: exporters of high value produce, exporters of low value produce and importers of essential supplies.

a. Exporters of high value produce

Tea at about K. 1000/tonne and tobacco at about K. 3000/tonne are relatively high value agricultural products. Although accustomed to paying about K. 150/tonne for delivery by rail to port of shipment, the industry is prepared to pay prevailing rates of K. 300-400/tonne to move products to Durban when rail is unavailable. The industry has critical contract delivery dates to meet, and the producers face cash flow problems if payments are delayed. Interest costs mount quickly where short-term borrowing can cost 1 1/2% per month. This is more critical for the individual tea estates whose financial capacity is more limited than for the large firms which buy tobacco at auction. However, the price buyers will pay for these products is reduced by their estimates of inventory and shipping costs, so the impact is finally passed back to the grower.

Some shipments have been tried through Dar es Salaam but more transport is offered on the Durban route which offers better security and guarantee of delivery times. Even air freight has occasionally been resorted to when attractive backhaul rates have been offered, (e.g., the recent arrangement for a UTA 747 to land in Lilongwe).

All exporters will use the Nacala rail route to the coast whenever possible since it is the most economical transport route. Their contingency plans are therefore to use Nacala if possible and road/rail or simply the road route to Durban via Zambia and Zimbabwe, or Zambia and Botswana, in the event of congestion on the Nacala rail route.

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The packaging of tea and tobacco in containers, rather than break-bulk, has been accelerated by the transport problem. Nacala port has relatively good capacity for handling containers but is very limited for breakbulk. Since all of the container boxes are controlled by freight forwarders, the shippers are completely dependent on these agents to organize the most expeditious transport at the lowest cost. Sometimes these agents have been able to negotiate backhauls to Durban at rates competitive with rail.

b. Exporters of low value produce

Exporters of sugar and maize, worth K. 150 and K. 275/tonne respectively, are most seriously affected by the Beira rail line closures. The value of the product will not stand the cost of long distance road transportation, therefore options are very limited. In the main, producers hope to use the Nacala line and have to stockpile their produce during times when the line is congested. When covered warehousing capacity is exhausted, produce has to be stockpiled under tarpaulin.

Maize is now available for large quantity exports, and has been sold largely to regional markets and therefore has to move mainly out of Malawi by road. High transport costs tend to constrain access to other export markets.

In the case of sugar the world market price largely dictates the transport options. The possibility of water borne navigation on the Shire and Zambezi rivers, which operated at the turn of the century, is out of the question because of route insecurity. If security were restored, the Beira rail route would presumably be available again, and this would be used.

Small tonnages of sugar are being exported by rail. These have to compete for limited break-bulk capacity with maize sold to Mozambique. Some sugar tonnage is moving at low rates as backhauls to other higher value imports, but opportunities are increasingly limited. With large quantities of sugar and maize competing for out-bound trucking capacity, the traditional imbalance of tonnage in favor of imports is being reversed. Therefore it is possible that it will take a long time to move all of the available sugar and maize out of the country. Maize is likely to receive priority both because it has been sold to regional markets and since it can carry a higher transport cost by virtue of having a lower production cost.

c. Importers of essential supplies

Importers of essential supplies, which include liquid fuels and fertilizers, have a number of options open to them regarding routing. Although it may be more expensive, there will always be an alternative mode of transport and the additional cost can be passed on to the buyer. While there is obviously an economic limit as to how much consumers will pay, it has been demonstrated that in the case of

fuel the consumer in the short-term will pay the additional cost, whilst in the long-term the industrial user will look for alternative types of fuel. For example, twenty years ago, a large number of tea estates used oil firing which has now been superseded by firewood, which is grown on estates themselves on an eighty year cycle.

In the case of fertilizer, estates have not reduced their facilities purchased in the face of induced higher transport costs. However, as discussed earlier, Optichem would cease to produce fertilizer if raw materials had to be delivered at road transport costs.

Smallholder use of fertilizer for the 1982/83 season was restricted by availability of only about 70,000 tonnes whereas the targeted need was estimated at about 120,000 tonnes. Nevertheless, production of maize and tobacco is at record levels this year. This is a result of putting into production more hectarage in anticipation of higher prices. Thus, there will again be a shortfall between estimated demand and supply of fertilizer as discussed in Section I, D.1.

The demand for fertilizer is a function of the price of fertilizer to the smallholder (presently subsidised by ADMARC) and the price paid to the smallhoder for his output. A World Bank Mission constructed a simple model to simulate these relationships with respect to maize as follows:

- Assume present fertilizer price and present maize prices (base case). For the base case, total fertilizer demand is 92,000 tonnes (fertilizer demand for maize is 57,860 tonnes) and production is 1.24 million tonnes. For the alternative scenarios, if maize prices were not increased, total fertilizer demand would drop to 66,000 tonnes and fertilizer demand for maize would decline to 42,850 tonnes and production would drop to 0.8 million tonnes. With a 10% increase in maize prices, fertilizer demand and production would be similar to the base case. Farm profits are maximized in the base case while Government revenues are greatest when fertilizer prices are increased without an increase in maize prices.

- Assume a 45% increase in fertilizer price, which would eliminate almost all the subsidy on fertilizer imported through Durban, with a 10% increase in maize prices or with present maize prices.[1]

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1 For a detailed description of the model and other policy simulations considered see "Fertilizer Policy Analysis", prepared by an IBRD Mission for the Government of Malawi, June, 1983.

An increase greater than 10% in the price paid for maize or K 11 per 90 kg bag is not considered. The current selling price of maize FOB Malawi is about K 13 per 90 kg bag. ADMARC handling and transportation costs are estimated at K 34/tonne or about K. 3 per 90 kg bag. Therefore ADMARC would appear to break even at a price of K 10 per 90 kg bag.

Prices of other essential imports from non-regional sources are impacted by higher inland transport costs which thus increases the cost of individual production and the cost of living. Presently there are no evident shortages of consumer production and industrial inputs-nor business failures which can be directly attributed to the transport problem. However there is a depression in economic activity in Malawi which is at least in part related to the transport crisis.

d. Summary

It is clear that the transportation bottlenecks and attendant transport costs are serious and impact on different industries to varying degrees. Certainly it will create a further deterioration in the terms of trade by increasing the cost of imports and decreasing the value of exports. Net foreign exchange earnings potential is diminished to the extent that additional foreign exchange is required for transport, earnings are foregone for production which can not be moved, and agricultural productivity is diminished due to the lack of adequate fertilizers. The cost of living will rise as the costs of domestic production and direct imports rise as a consequence of additional transport costs.

The Malawi Government and the private sector, however, have taken many initiatives to cope with the problem and to alleviate the hardships which might otherwise have occured. Those actions directly relate to transport have been described earlier in this report. Otherwise the economy could have been crippled by the crisis.

4. Import/Export Flows and Constraints by Route

The distribution of these import and export flows between routes over the last 5 years is shown in Table 3. (see Figure 3) Clearly the flows have shifted from rail to road due to the blockage of the Beira rail line starting in 1982.

In summary present routes appear to be handling, or to be able to handle, the following volumes of goods:

TABLE 3

DISTRIBUTION OF MALAWI'S EXTERNAL TRADE BY ROUTE: 1979-1983

(000 tonnes)

		Rail Via Beira	Rail Via Nacala	Road Via Tete	Road Via Lusaka	Total
1979	Exports	183.8	75.1	6.9	2.1	267.9
	Imports	381.6	150.7	9.0	6.9	548.2
	TOTAL	565.4	225.8	15.9	9.0	816.1
1980	Exports	197.6	87.4	12.3	7.7	305.0
	Imports	313.1	147.4	20.2	12.3	493.0
	TOTAL	510.7	234.8	32.5	20.0	798.0
1981	Exports	194.7	73.9	12.4	10.9	293.0
	Imports	267.2	125.4	81.0	53.9	531.8
	TOTAL	461.9	199.3	93.4	64.8	824.8
1982	Exports	117.5	60.4	30.0	80.0	287.9
	Imports	196.0	101.9	50.0	110.0	745.8
	TOTAL	313.5	162.3	80.0*	190.0*	745.8
1983	Exports	23.3	90.0	34.0	150.0	297.3
	Imports	31.7	123.8	58.0	170.0	383.5
	TOTAL	55.0	213.8	92.0*	320.0*	680.8

* Estimate

Source: Malawi Railways

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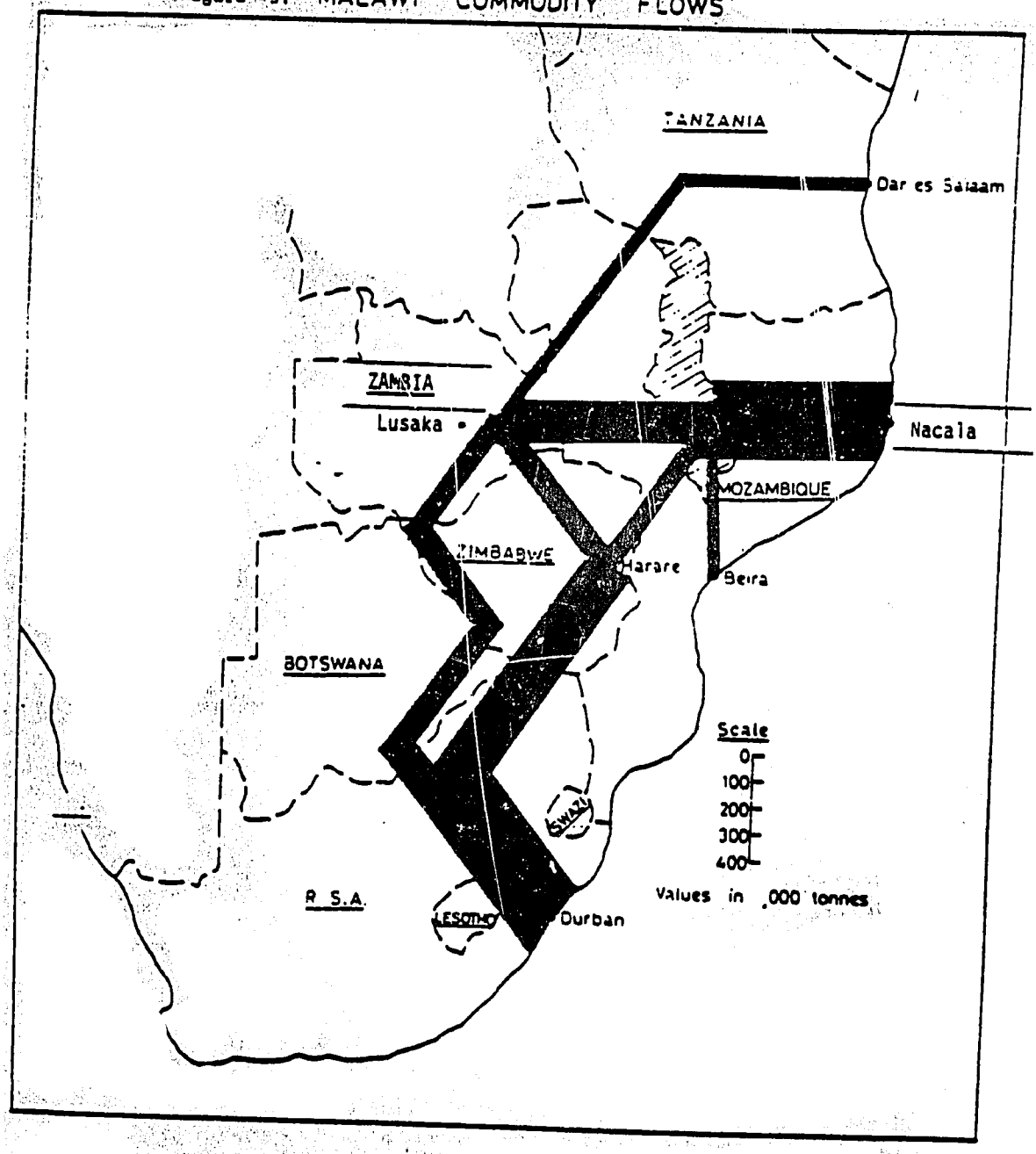
Figure 3. MALAWI COMMODITY FLOWS



Imports and Exports

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Table 4 — Commodity movements by route (tonnes)

	Imports	Exports	
1. Nacala rail link:	200,000	115,000	(1)
2. Lusaka road link (Mchinji)	170,000	100,000	(2)
3. Tete road link (Mwanza):	50,000	25,000	(3)
Total	420,000	240,000	
Projected Volume	500,000	300,000	
Shortfall	80,000	60,000	

Notes: (1) Estimate of capacity, but this line has recently become subject to insurgents.

(2) Projection of recent commodity movements (mid 1983).

(3) Projection of recent commodity movements (mid 1983).

At existing levels of utilization the Lusaka road will carry approximately the same volume of goods as the Nacala rail line whilst the Tete road carries approximately one quarter of either of these routes.

Since the capacity on the Nacala rail line is limited and since there are constraints on the Tete road (due to insurgents), the only route capable of expansion is the Lusaka route. Hence the shortfall indicated above is likely to be transported on this route. In terms of vehicle trips, this can be translated into an additional 50% increase over existing volumes.

Sections of this road are already in bad condition, particularly between Nyimba and Petauke. It has been estimated that approximately 10% of the road requires major reconstruction, a further 10% requires major pot hole repairs, and approximately 20% requires major shoulder repairs. Hence as the road is already approaching its design life, urgent rehabilitation work is required so as to prevent further deterioration and to enable the life of the road to be extended for a further ten years.

The condition of this link is therefore critical to Malawi. If the road is allowed to deteriorate this will result not only in significantly increased financial and economic vehicle operating costs on this route, but also in the extreme, in a breakdown in the supply of essential imports to the country and foreign exchange earning commodities.

More detail is provided below for the two major road routes: Blantyre-Mwanza-Harare and Lilongwe-Mchinji-Lusaka.

5. Recent Road Traffic to Zambia on the Lusaka Road via Mchinji (3 months sample)

In recent years heavy traffic on the Mchinji to Lusaka road has been very low (for example two-directional traffic of approximately 60 heavy vehicles per month in 1981). With the changing circumstances in Mozambique traffic has considerably increased. The following Tables 5 and 6 give heavy vehicle counts for vehicles entering and leaving Malawi for three months during 1983 (May-July) and also indicate the origin (in terms of the country of registration) of the vehicles.

Table 5 — Number of heavy vehicles entering Malawi at Mchinji (by country of registration)

1983	Malawi*	Zambia	Zimbabwe	R.S.A.	Botswana	Total
May	147	202	157	62	6	574
June	212	175	152	62	4	605
July	151	253	93	62	2	561

Table 6 — Number of heavy vehicles leaving Malawi at Mchinji (by country of registration)

1983	Malawi*	Zambia	Zimbabwe	R.S.A.	Botswana	Total
May	144	124	144	53	9	474
June	204	126	112	59	7	508
July	140	238	94	66	1	539

Source: Ministry of Transport and Communications

* There were 26 tankers owned by Zimbabwe firms but operating with Malawi registration under contract to the Malawi Finance Company. It is estimated that these trucks accounted for about half the tanker capacity or about 425 vehicles over this 3 month period.

The following Tables 7 and 8 show the tonnages of imports and exports that were carried on this route in these three months.

The following comments can be made concerning this recent but small sample concerning commodity movements in 1983 by road via Mchinji.

a) Malawi-based transporters made approximately 30% of the total number of international trips. (This includes temporary tankers under hire from Zimbabwe).

b) The volume of imports was significantly larger than the volume of exports. However, maize is constituting an increasing percentage of the total volume of exports.

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TABLE 7

IMPORTS VIA MCHINJI BY COMMODITY

(May - July 1983)

Imports	May		June		July		Total		Average Load Tonnage
	No. Veh.	Ton-nage	No. Veh.	Ton-nage	No. Veh.	Ton-nage	No. Veh.	Ton-nage	
Petrol, Diesel etc.	202	5807	224	6645	108	3280	534	15732	29.5
Coal	112	2954	69	1761	9	234	190	4949	26.0
Fertilizer	4	116	17	487	77	2292	98	2895	29.5
Wheat and Flour	36	1028	26	720	29	787	91	2535	27.9
Building Materials	13	360	31	774	43	1144	87	2278	26.2
Steel Pro. & Machinery	36	881	33	892	7	218	76	1991	26.2
Mixed & Gen. Cargo	70	2044	48	1188	51	1356	169	4588	27.1
Others	85	2164	118	2944	101	2470	304	7578	24.9
Sub-Total	558	15354	566	15411	425	11782	1549	42546	27.9
Empty Trucks	16	-	39	-	136	-	191	-	-
Total	574		605		561		1740	42546	24.5
Excl. Tankers							1015	26814	26.4

Source: Ministry of Transport and Communications

TABLE 8

EXPORTS VIA MCHINJI BY COMMODITY

(May - July 1983)

Exports	May		June		July		Total		Average Load Tonnage
	No. Veh.	Ton-nage	No. Veh.	Ton-nage	No. Veh.	Ton-nage	No. Veh.	Ton-nage	
Tea	98	2600	40	1038	29	646	167	4284	25.6
Tobacco	50	1252	67	1724	64	1471	181	4447	24.6
Sugar	75	2013	83	2149	45	1273	203	5435	26.8
Maize	-	-	64	1765	251	7087	596	8852	26.9
Other	86	1346	55	981	42	1076	142	3403	24.0
Sub-Total	309	7211	309	7657	431	11553	1049	26421	25.2
Empty Tankers	116	-	159	-	75	-	350	-	-
Empty Trucks	49	-	40	-	33	-	122	-	-
Total	474	7211	508	7657	539	11553	1521	26421	17.4

Source: Ministry of Transport and Communications

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c) One half of the total volume of imports and exports (by weight) had its origin or destination in Zambia and one third had its origin or destination in Zimbabwe.

d) Fuel constituted over one third of the volume of imports via this route and maize almost two thirds of the volume of exports.

e) On average approximately 50 empty containers per month were being brought in via this route (usually transported in groups of three). All outgoing containers were full.

f) All fuel tankers necessarily return empty. However, some diesel has been imported experimentally by container in inflatable rubber tanks.

g) In terms of seasonality during this period tea exports were low, whilst tobacco and maize exports were rising. Fertilizer imports were also rising and fuel imports might be slightly understated. Overall it is expected that imports and exports will exceed the level recorded in a typical three month period.

h) If the observed trend continues, this route will handle approximately 100,000 tonnes of exports in a full year and 170,000 tonnes of imports.

6. Recent Road Traffic to Zimbabwe through Tete Province Mozambique, via Mwanza

Besides the Zambia link there is one other alternative international road connection out of Malawi to Zimbabwe through Mozambique. This road passes through Tete from Mwanza and is used extensively for importing coal from the Moatize mine. Recent tonnages moved on this route are as follows:

Table 9 Commodity Movements on Mwanza to Tete Road (Tonnes)

	June '83	July '83
Imports	4,257.6	3,617.7
Exports	2,336.7	2,118.1

Source: Ministry of Transport and Communications

This road has been and is subject to disturbances due to insurgent activity in Mozambique. As can be seen, imports are predominant, the majority of which is coal. If movements continue at this rate, it is envisaged that approximately 50,000 tonnes if imports and 25,000 tonnes of exports can be transported via this route on an annual basis.

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In terms of hauliers, the following Table 10 shows the country of registration of the vehicles using this route. Generally Zimbabwean registered vehicles are more frequently encountered.

Table 10 Country of Origin of Vehicles using Mwanza-Tete Road (June-July 1983)

Imports	June	July
Vehicles in - Malawi registered	73	89
Vehicles in - Zimbabwe registered	123	92
Vehicles in - R.S.A. registered	-	1
Total	196	182

Exports	June	July
Vehicles out - Malawi registered	66	90
Vehicles out - Zimbabwe registered	98	96
Vehicles out - R.S.A. registered	3	-
Total	167	189

C. ROAD TRANSPORT SERVICES

1. Factors contributing to the Weakness of Malawi's Trucking Industry

The trucking industry in Malawi is composed of many individual operators, small firms, and a few medium sized firms most of which are struggling to exist. Historically there is a record of enterprises which have collapsed. The cause can be briefly summarized as follows:

(a) Entry into domestic trucking has been relatively easy. Most operators have had insufficient capital, management expertise or training to operate as viable businesses. Therefore the industry has a poor business reputation with financiers and insurers. Presently there is overcapacity in vehicles unsuitable for international trucking for at least 8-9 months/year.

(b) The railroad has been provided protection versus trucking and has had the capacity, until the recent crisis, to carry most international traffic at lower cost.

(c) Foreign based firms have had virtually free entry into Malawi. Since in-bound international cargoes of relatively high value goods have dominated traffic volumes and covered most of the haulage costs, these firms have been able almost to monopolize international movements. Their vehicle operating costs have also been lower than those of Malawi operators.

(d) Malawi operators have had great difficulty in obtaining permits to operate through neighboring countries.

(e) Malawi purchasers of transport services have made little attempt to take steps to reduce transportation costs through improving terminal efficiencies, reducing seasonal peak elements, balancing two directional traffic and prompt payment for services. Instead their practice has been to place the main burden of keeping transport rates down on the transporters. (During the last few months MITCO has acted to alleviate this problem by arranging backhauls and insuring promt payment for services.)

2. Truck Fleet Size and Domestic Road Haulage

The road haulage companies and individuals serving Malawi at the present time, as shown in Table 11, are divided into two categories, those having in excess of five vehicles and those having five or less vehicles. The total fleet of larger operators is 215 units. In addition members of the African Businessmen's Association, composed of many small owner/operators, have about 150 vehicles and other operators have about 40 vehicles, giving a total of approximately 400 vehicles.

Table 11 Principal Malawian road haulage operators and ownershi

A. Organizations having more than five goods vehicles

- Progressive Panel Beaters & Transport Contractors	- 16 units
- Clan Transport Co Ltd. (MFS) [1]	- 12 units
- Container Terminals (M) Ltd (MFS) [1]	- 8 units
- J. Tennett & Sons Ltd.	- 16 units
- Road Motor Services (Malawi Railways, collection & delivery services only)	- 16 units
- O.E. Mahomed (Asian)	- 29 units
- African Business Men's Association (separate individual owners of vehicles)	- number not known (estimate 150 units)
- Press Transport (1975) Ltd.	- 32 units
- Spearhead Enterprises Transport and Maintenance Services Ltd.	- 15 units
- Amosi Transport and Maize Mills	- 9 units
- A. K. Mahomed (Asian)	- 25 units
- Freight Transport (Asian)	- 11 Units
- Inter Carriers (D. Carvalho)	- 7 units
- F.A. Lambat (Asian)	- 15 units
- Kanekha Transport	- 8 units
	215 est.

B. Organizations having five good vehicles or less

- Fargo Limited (Asian)	- 4 units
- Fersons	- 5 units
- Marine Containers Ltd. (Asian)	- 5 units
- Viola Transport	- 5 units
- Glens Removals & Storage (Mw) Ltd.	- 3 units
- AMI Rennie Press (M) Ltd (Mixed)	- 1 unit
- Cargo Transfer (Asian)	- 3 units
- Trans-Connection	- 4 units
- Springbok Transport	- 3 units
- Rahim I. Hamdani	- 3 units
- Kwezani Transport, Limbe) Bhadelia Transport, Blantyre (refugee)) Universal Transport, Limbe (refugee)) Jumani Transport (refugee)) - Mkwezalamba Transport)	- owner with one or two vehicles
	40 est.

1 Owned by Manica Freight Services, one of the largest freight forwarding companies.

* Principally indigenous ownership.

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	40 est.

1 Owned by Manica Freight Services, one of the largest freight forwarding companies.

* Principally indigenous ownership.

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Of the total number of vehicles represented in the above two categories, less than 5% or 20 vehicles are of suitable size and in suitable condition for long distance haulage, particularly haulage of containers.

The Government has a 'localization' plan whereby Asian transporters were to cease operation by the end of 1983. Some of these transporters concerned have been established in the industry for many years. When this plan is finally implemented the number of vehicles operated by road transport contractors in Malawi will fall from 394 to 317. This depletion in the number of domestic road transport operators in Malawi may further weaken the international road transport capabilities. Several of these operators have had the financial resources and successful operating experience to engage in long distance trucking.

Presently the Government sets minimum and maximum haulage rates for internal transport, in the range of 10.5 to 27.2 tambala per tonne-km. Because of the keen competition for business, the prevailing rates tend to be at the low end of this range. ADMARC, as the single largest parastatal company purchasing transport essentially for smallholder crops and farm inputs, has specific rates intended for small trucks which are 15.0 tambala per tonne-km for bitumen roads and 19.6 tambala per tonne-km for non-surfaced roads. Special adjustments are allowed for short hauls but are seldom paid in order to keep transport costs low. These rates would be profitable if vehicle utilization was high. In fact due to an excess of transporters, limited backhauls, long terminal delays and poor transport management, many transporters have failed to operate profitably. This has given road transport a bad reputation among financial institutions.

Real efforts by buyers of transport services to keep transport costs down through more efficient terminal operations and organization of backhauls, would have helped transporters achieve higher vehicle utilization. For example, for agricultural products it is not uncommon for vehicles on a 70 km haul to spend an average of 200% of running time each day in queuing, loading and off-loading.

In summary, the local transport industry, predominantly small operators, has suffered low utilization rates and has not appreciated the relationship of utilization rates and load factors to profitability. Purchasers of transport services also have been concerned with obtaining low tariffs, rather than taking steps to manage their own transport handling more efficiently and thereby permitting transporters to achieve better utilization. Government's policy of free entry to the trucking industry has permitted over-capacity in an industry dominated by small operators who frequently do not clearly understand the market and who have poor management skills.

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This experience with domestic internal transport has contributed to the present situation where few indigenous truckers have the financial or management capability to undertake the more expensive and organizationally complex tasks of international transport.

3. International Road Haulage

For many years there was little effort by the Malawi Office of the Road Traffic Commissioner to ensure that Malawi transporters obtained foreign permits, although recently the office has actively supported applications by Malawian firms to operate in Zambia and by several firms (mostly single vehicle owners) to operate through Botswana.

Prior to 1977 a few foreign-based transport contractors operated into Malawi. These were Swift Transport (Zimbabwe), Clan Transport (Zimbabwe), Biddulphs (Zimbabwe), Glens Removals (Zimbabwe), Central African Road Services (Zambia). There were part of multinational companies having subsidiaries in Zambia, Botswana, Zimbabwe and South Africa.

Since 1977 the list of foreign based transporters operating into Malawi has expanded considerably. The names are given in Table 12 below along with the countries in which vehicles are registered.

Table 12 Foreign registered road haulage contractors

Contract Haulage	(Zambia)
Clan Transport	(South Africa, Zimbabwe, Zambia)
Freight Speed	(South Africa)
Bormans	(South Africa)
Shamrock	(South Africa)
Arrow International	(South Africa)
Central African Road Services	(Botswana)
Swift	(United Kingdom with subsidiaries in South Africa, Zimbabwe, Zambia, Botswana, Malawi)
Allways Cargo Carriers	(Zimbabwe)
M.T.S.	(Zimbabwe)
Intercept	(South Africa)
Coley Hall	(Zimbabwe and South Africa)
Rennies	(South Africa)
Unfreight	(South Africa)
Interfreightways	(South Africa)
Russel Noach	(Zimbabwe)
North Eastern Transport	(Zimbabwe)

This fleet has been of benefit to Malawi in keeping open access to sea ports. However, no restrictions were placed on the road service permits pertaining to foreign registered vehicles, with the result that in many cases the foreign registered vehicles are delivering to the door and taking out return loads from source.

This means that Malawi domestic transport, which traditionally provided the feeder service to railways, is left standing idle whilst foreign vehicles collect and deliver their goods. From the economic standpoint it means that Malawi is paying foreign exchange for the transport of goods moving over a road within its own borders, sometimes for a distance of nearly 600 kilometers. The impact of this on the already depressed domestic transport industry has been critical.

In 1983 the Government of Malawi announced that foreign permit holders will have to terminate transport runs within certain restricted areas at Lilongwe from Mchinji and at Blantyre from Mwanza. The main intention of this is to bring traffic back onto the railways. Domestic road transporters should benefit from this move since routing will help to re-establish the traditional collection and delivery system to and from the railways.

Foreign international transporters have had two major cost advantages over Malawian international transporters. Firstly, vehicle operating costs from South Africa and Zimbabwean transporters are lower than those of even an efficient Malawi operator. Costs of vehicle purchase, spare parts, tyres and insurance are lower. Equipment is either manufactured locally or imported at lower cost and taxation is generally lower. Additionally vehicles are generally operated by large well-managed firms who achieve high rates of utilization.

Secondly these firms have had access to high value imports arriving at Durban or the Harare railhead. Typically they charge road tariffs on import commodities sufficient to cover all or most of the round-trip. Upon arrival in Malawi they can offer charges for backhauls at low rates which are largely additional profit. In contrast the Malawi transporter has to charge a tariff on out-bound cargos sufficient to cover all or most of his round-trip costs. Few Malawian truckers have the capacity to arrange for a guaranteed high tariff backhaul originating in another country.

The competitive position of Malawian versus Zambian truckers is better. Operating costs and efficiency levels are more comparable, particularly given present problems and costs of maintaining vehicles based in Zambia. Given the relative proximity of Lusaka and the large volume of Malawi cargo with origins or desinations at the Lusaka railhead, it is easier to obtain high vehicle utilization rates and two directional cargoes. For these reasons, Malawi truckers have been relatively more successful in obtaining a share of these cargo movements. Likewise, these cargoes are the logical target for expanding Malawi fleet participation into international haulage.

According to traffic data collected in the period May-June 1983, foreign transporters' vehicles consist of 70% of total vehicles entering/departing Malawi (Mchinji) on the Zambian route and 66% on the Mozambique (Tete) route. Present Malawi transporters show an even smaller percentage of total tonnage due to their smaller average truck size. This is estimated at 25-30% of international tonnage.

D. GOVERNMENT AND DONOR RESPONSE TO THE PROBLEM

In the field of transportation, the Ministry of Transport and Communications is the key government ministry. It regulates all rail, road and air transport and telecommunications and has responsibility for road traffic regulations and permits through the Road Traffic Commissioner. Recently, in response to the critical transport problem it has focused on four specific tasks:

a. Establishment of a National Transportation Committee.

b. Encouragement of the creation of the Malawi International Transport Company (M.I.T.C.O.).

c. Negotiation of bilateral agreements with neighboring countries.

d. Promotion of Malawi road haulage capacity.

1. National Transportation Committee

In April 1983, in response to the general transportation problems incurred due to the actions of insurgents in Mozambique, the MOTC was instrumental in establishing a restructured National Transportation Committee. The objectives of this Committee were to assist in formulating policy and in monitoring and directing the flow of cargo traffic through the transit corridors serving Malawi for the following purposes:

to support efforts to restore and strengthen Malawi's traditional low-cost rail transit routes to the ports of Beira and Nacala;

to identify and evaluate specific transit routes available to Malawi and determine how they might best be utilized;

to reduce the cost and improve the performance of transit transport opperations;

to achieve closer co-ordination between import and export movements so as to obtain more cost-effective utilization of available transit services;

to undertake timely corrective actions in response to anticipated and unforeseen emergency situations;

to improve the effectiveness of Malawi's representations to and relations with neighboring states on transit matters;

to endeavor to prevent consignments to/from Malawi from becoming stranded in ports or in the international transit pipeline for any reason.

There are eleven full voting members of the committee which include representatives from the:

Office of the President and the Cabinet
Economic Planning Department
Ministry of Works and Supplies
Ministry of Transport and Communications
Ministry of Trade and Industry
Malawi Railways
Chamber of Commerce
Shippers Council
Clearing and Forwarding Agents Association

There are several associate members of the Committee which represent the business and commercial community in Malawi, for example the tobacco exporters, tea and sugar producers, coal users, petroleum and fertilizer industry, ADMARC, etc.

The full Committee meets quarterly to recommend policy and operational changes to Government. It is supported by a secretariat (MOTC staff) whose function is to collect and analyse data concerning transit commodity flows. From this it develops suggested or advisory routing and traffic flow plans. Recently a special Task Force from this committee has been set up with representatives from the Office of the President and the Cabinet, Ministry of Transport and Communications, Ministry of Agriculture and the Treasury in order to handle emergency transport decisions.

The Secretariat has initiated the monitoring of road traffic flows at the border crossings at Mchinji and Mwanza. Malawi Railways are also monitoring rail and commodity movements at Nayuchi and Nsanje. From knowledge of conditions on different routes advisory routing plans have been prepared. In addition the committee has been investigating methods for enhancing the use of Mchinji as a transhipment point, especially for fuel, and other general measures to increase transport efficiency.

2. Malawi International Transport Company - MITCO

In recognition of the difficulties faced by both Malawian buyers of transportation services in obtaining an efficient level of international haulage service at affordable cost and of Malawian transporters in obtaining a share of this haulage work, a privately operated international road freight "booking agency" was established with GOM encouragement in 1983. This organization is described further in Annex F2. This is an important organization which will assist in contributing to the promotion of the Malawian road haulage industry in international operations.

3. Bilateral Agreements with Neighboring Countries

The Government is endeavouring to enter into bilateral transport agreements with neighboring countries. A draft agreement between the Government of Malawi and Zambia has been prepared and is under discussion. This aims at granting each country reciprocal rights to transport goods in transit through the other's country. If this is successfully negotiated, a similar agreement will be proposed with neighboring Zimbabwe.

The agreement aims essentially:

- to coordinate hours of customs posts at ports of entry;

- to prohibit carriage of goods between two internal points in the other's country;

- to implement a system for issuing trip or route service permits;

- to exempt vehicles registered in one country and operating in the other from paying any corresponding taxes or duties. (This also applies to road tolls);

- to determine the services, routes, frequency, tariffs etc. for passenger services between the two countries;

- to ensure compliance of vehicles with the legally established technical standards in the country of operation and that drivers hold valid heavy operator's licenses;

- to enable carriers to solicit return traffic in the other's territory provided that this is undertaken through officially licensed agencies;

- to ensure compliance with regulations in the other's country and in particular that carriers maintain valid insurance in accordance with the country's regulations;

- to institute agreed procedures where infringements of the above regulations occur;

- to ensure that charges for the transport of goods are stated and collected in the currency of the country where the vehicle is registered. The cargo rates are to be set through open market competition;

- to enable carriers operating in the other's country to make arrangements to pay for fuel, maintenance, repairs etc. in the other's country in the currency of that country, and to enable operators to maintain bank accounts in the other's country; and,

- to establish a joint commission to manage the implementation and operation of this agreement.

Route service permits will be valid for one year and cargo transport trip permits will be subject to annual quotas (for two periods of six months) divided equally between the two countries. Certain cargos will be exempt from the quota. A scale of fees will be agreed for the issue of the trip and route service permits. Efforts will be made to prevent domination or control over cargo routes by any single transporter or group of transporters.

Difficulties with Zambian cooperation on this issue have been encountered. However, this agreement is under discussion and it is hoped will be enacted 1985.

4. Promotion of Malawi Road Haulage Capacity

Although Malawi does have some hauliers who operate internationally, most lack the organizational support, skills and financial resources necessary to operate effectively in competition with the highly-professional foreign-based transporters, who presently dominate Malawi's international road haulage market.[1] The MOTC therefore supports the development of a small, but competent locally-controlled road haulage industry which will be responsive to emergency needs, flexible in routings and would conserve scarce foreign exchange.

The Ministry of Transport and Communications is encouraging several potential Malawian "umbrella" organizations which would engage in and promote international road haulage operations. They would be privately owned and would operate their own vehicles and in addition would sub-contract work, lease equipment and provide other services as required to individual Malawian owner-operators. Each organization would be professionally managed with specialists in freight marketing, fleet planning, operations, maintenance and repairs and accounting and financial management. These specialists would manage the organization while at the same time would train smaller operators under an appropriate arrangement.

Individual owner-operators are contracted with to the extent that they are able to perform according to the requisite standards. The "umbrella" organization might lease vehicles to employee drivers, who could then gradually acquire ownership in the vehicle. Simultaneously these operators would be acquiring the technical and financial skills necessary to operate effectively independently.

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1 See Section C for detailed discussion of Malawi's road transport services.

5. Development of the North/South Corridor via Tanzania

The GOM plans to allocate approximately 30 percent of its total capital investment over the next three (3) years (1984/85, 1985/86 and 1986/87) to continue to improve regional road links and related maintenance, to expand the feeder road network to improve rural access to markets, to improve external links through continued investment in the Malawi railway, and to complete the 93 kms of unpaved section of the main North/South road in Malawi. The GOM has included in its investment plans proposals to pave the Champhoyo-Mbowe road and to construct the Karonga-Ibanda road, the two missing "links" in the northern access route to the Tanzania border.

a. North/South Corridor Study

Due to the current transport difficulties encountered in importing and exporting commodities via Mozambique, the Government of Malawi has been investigating other possible transit routes, in particular via Tanzania. With this aim the Ministry of Transport and Communications is commissioning a feasibility study to investigate the northern access route to Tanzania. This will study the transport systems linking the Blantyre/Dar es Salaam corridor. This is an attractive solution, due to the existence of road, rail and lake modes, which is also signigicantly shorter than routes being presently used and necessitates transiting only one other country. The study will investigate both possible incremental short term and longer term permanent solutions. Inter-modal transport options will be examined which will involve study of physical facilities in Tanzania and at the port of Dar es Salaam, in addition to options for the improvement of road, rail and lake facilities in the Republic of Malawi.

b. Tanzania Road Link

In addition to this broad corridor study, the Ministry of Works is studying a particular road link within the corridor. By 1985 with the exception of a 59 km mountainous section between Champhoyo and Mbowe, the north-south internal road axis in Malawi will be paved between Chikwawa (south of Blantyre) to Kasungu in the north. The existing earth road from Karonga to Songwe River has poor formation, alignment, and drainage. A new Class I bitumen road on a new alignment is proposed to link Karonga in Malawi across the Songwe River border to Ibanda in Tanzania. From there the road will connect to join the Itungi-Mbeya road which links with the Trans-East Africa Highway (Tan-Zam) to Dar es Salaam. The proposed road is 50.3 kms in length, 4 kms of which are in Tanzania, and necessitating two bridgesover the rivers Songwe and Kiwira. This is a vital link, to which both Malawi and Tanzania have agreed in principal. British ODA Aid is building Bailey bridges to cross both rivers on a crash program. By completing this critical link Malawi will become fully accessible by road through Tanzania to the port of Dar es Salaam.

c. Lake Service

Within the north-south corridor, considerable interest is focused on developing the existing capability of the lake services. Currently some passenger and freight services are provided on the lake by Malawi Railways. The principal ports of Chilumba, Nkata Bay, Chipoka and Monkey Bay are linked by regular but infrequent services. Chipoka is significant in that it links with the existing rail system. A new fuel tanker has been built at Monkey Bay, capable of transporting up to 300 tonnes of fuel on the lake. With the existing barges, there is a vessel capacity for moving about 1,000 tonnes of fuel, considerably in excess of internal distribution requirements. Assuming vessels could make two round trips per week between Chilumba/Chipoka (approximately 450 kms), there is potential existing capacity for movement of 100,000 tonnes of fuel. This would be a major increase in Malawi's fuel input capacity and could handle 50% of the nation's requirements through 1987.

Further attention is also being focused on the possibility of using the lake for freight transport services. For example, by introducing a Ro-Ro system onto barges, goods could be transported from Chipoka to Chilumba at competitive rates and without incurring large capital costs. Two small barges each carrying say 10 trailers making 100 round trips per year could offer a maximum 80,000 tonne/year capacity on a Ro-Ro system. Malawi Railways is currently investigating suitable locations for the development of a new or existing port, and the North/South corridor study will examine possible locations in the north, such as Kapwe.

All the above initiatives show the creative response of the Malawi Government to the transport crisis, and its interest in promoting the private sector to deal with the major problems facing the country.

6. Donor Community Response

There has been significant interest shown by the donor community in providing support to the government to respond to the present transport crisis. In addition to USAID projects the following donor activities have developed.

Studies funded by UNCTAD and the European Development Fund (EDF), after examining the projected future composition of Malawi's foreign trade together with regional political and economic stability issues, have strongly recommended that the GOM give high priority to developing a northern transport access route to the port of Dar-es-Salaam, as mentioned above. This routing is shorter and therefore has potentially much lower costs for Malawi's external trade than the alternative routings through South African ports.

The recently approved IBRD Highway V project is financing a transport system study of this northern access corridor, which includes the proposed new road link between Malawi and the Tanzania-Zambia transport corridor at Mbeya for Malawi's external trade through Dar-es-Salaam, leading to specific recommendations for corridor development. The IBRD, African Development Bank and the EEC, are financing road construction and maintenance programs in Malawi. Construction is expected to commence shortly on the EEC-financed Blantyre-Mwanza highway and on additional sections of the major north/south highway link between Karonga and Lilongwe.

The British are installing Bailey Bridges on the Tanzania-Malawi river-crossings, and assisting with a 10 year track rehabilitation program on the older north/south section of the rail system in Malawi. West German assistance to the transport sector has been focused on lake services development, primarily the provision of vessels, equipment and training, plus some road construction. Additional West German proposals have just been approved for the provision of additional rail and road haulage equipment.

The Canadians, in 1982, completed the rail link from Salima west to the Zambian border at Mchinji. With Indian Government assistance, this rail link is expected to be extended to Chipata, Zambia's major eastern regional center. There are no firm plans for completing the remaining 600 km of rail linkage between Chipata and Lusaka. Assistance for the rehabilitation of the Mozambique portion of the Nacala rail line is being financed by the governments of Portugal, France and Canada. Commencement of this major and badly needed track rehabilitation program has been repeatedly delayed. Once commenced, the effort is expected to take between 5-10 years to complete.

Clearly the transport crisis continues to be a major incentive for foreign aid in the Malawi transport sector, but there is still a major short-term weakness in the area of international road links and the international trucking industry.

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ANNEX F2

MOTC ORGANIZATION AND OFFICIAL POLICY

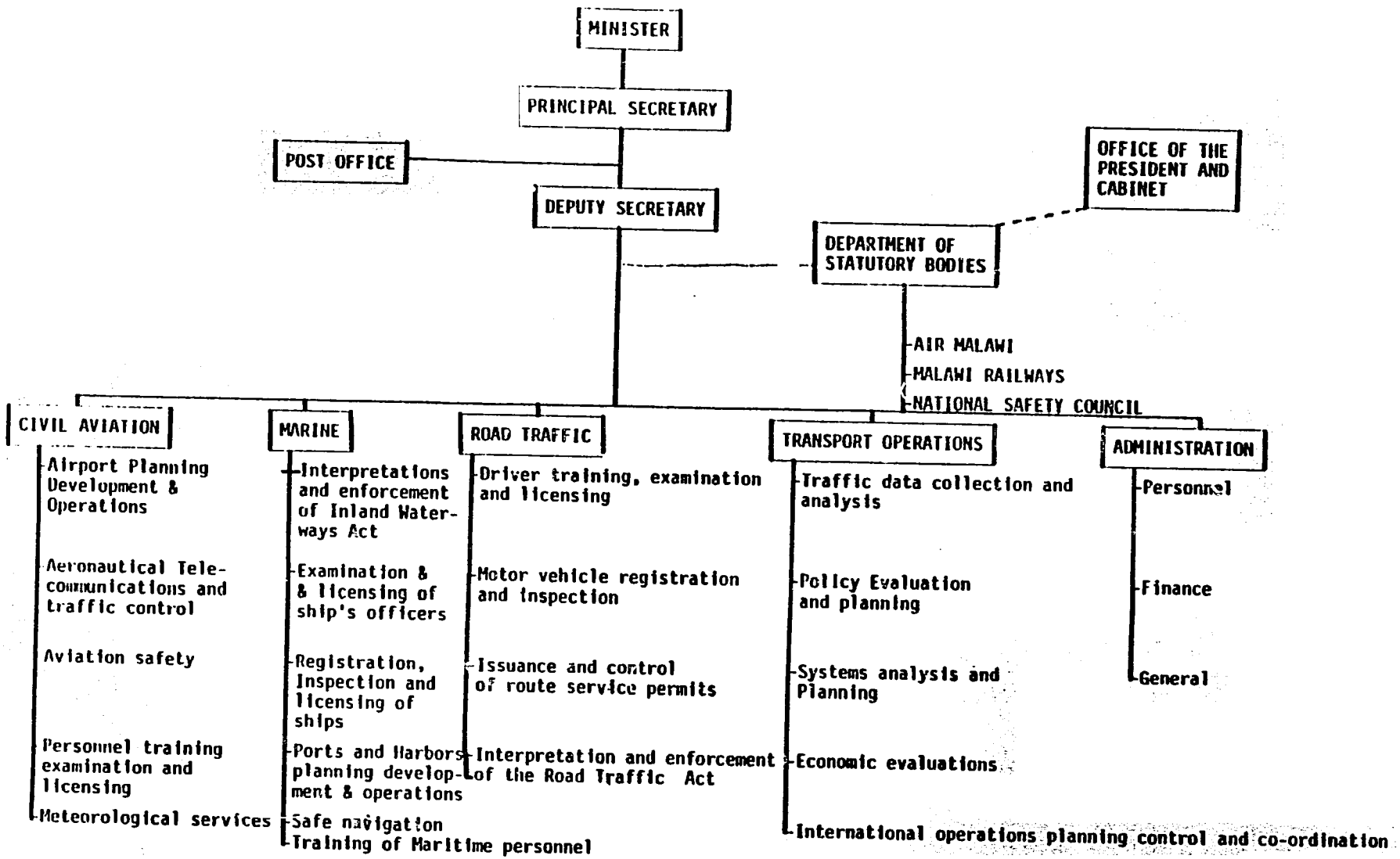
1. MOTC Organization

An organization chart of the MOTC is show in Figure F2-1. This indicates the 5 operational departments, the Post Office and three statutory bodies which report to this Ministry. The present project deals primarily with the Transport Operations and Road Traffic Departments (referred to as Transport Department and Road Traffic Commissioner's Office in the text).

A description of these two departments and a recent analysis of their functions and staffing are attached.

MINISTRY OF TRANSPORT AND COMMUNICATIONS - GOVERNMENT OF MALAWI - ORGANIZATION CHART

FIGURE F2-1



THE EMERGING TRANSPORT DEPARTMENT

The Transport Department was established in the Ministry of Transport and Communications during 1973. Its purpose is to advise the Ministry on the socio-economic, financial and other technical aspects of its transport policy planning functions. These policy planning functions have evolved over time through Government policy statements, legislation and established practices. They embrace all modes of transportation including road, rail, water and air.

The principal transport policy planning functions of the Ministry that would come within the scope of the Transport Department, are as follows:

i. To assist the Government in establishing its transport policies, including those relating to the direction and coordination of transport operations and development.

ii. To recommend suitable legislation and programmes for the implementation of the various policies.

iii. To ensure that the legislation and programme that have been adopted for policy implementation, are in fact implemented.

iv. To ensure that the management of the transport operating and regulating agencies under the jurisdiction of the Ministry, conduct their operations efficiently and in accordance with Government policy and legislation.

v. To improve the policy planning process within the Ministry, as may be necessary to enable the Ministry to meet its responsibilities more effectively. This will be done with due regard to the development of the planning process within the agencies under the jurisdiction of the Ministry and within the policy planning authorities of Government.

In accordance with existing organisational arrangements, the Transport Department is under the direction of the Principal Transport Officer. His tasks and responsibilities have been set down by the Ministry. These tasks and responsibilities may therefore be regarded as indicative of the functions of the Department. They are as follows:

i. To advise on the role, efficiency and organisation of the national transport industry and of the separate modes of transport which exist.

ii. To advise on the co-ordination of transport operations and planning within the Ministry and to advise on methods of improving Government's transport policies with particular reference to effective transport co-ordination and the need to avoid unnecessary duplication of transport facilities.

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To advise on the role and effectiveness of the transport regulating licensing system and the assessment of means to improve the system to meet changing needs.

iv. To advise on the role, efficiency and viability of the Statutory Bodies for which the Ministry of Transport and Communications has responsibility and where appropriate, on support or special consideration which should be given by Government to Statutory Bodies to enable them to satisfactorily carry out their obligations.

v. To examine, assess and make recommendation on all new investment proposals within the transport industry for which the Ministry has direct responsibility.

vi. To establish and maintain proper liaison between transport organisations on the one hand and transport users on the other to ensure that the varying and seasonal needs for the latter are satisfactorily provided for.

vii. To prepare with the co-operation of other branches of Government, Statutory Bodies, transport operators, and agricultural, commercial and industrial organisations, regular forecasts of tonnages that can be expected to be moved by the various modes of transport.

viii. To maintain and update relevant statistical data on transport operations in Malawi.

ix. To undertake such studies as may from time to time be necessary to carry out the duties enumerated above.

To enable the Transport Department fulfil the foregoing functions, four Professional and two clerical posts have been established. At the present time only four of the posts are filled. The posts and appointments are as follows:

Professional Posts

Principal Transport Officer	(P7)
Senior Transport Officer (Operations)	(P8)
Senior Transport Officer (Planning)	(P8)
Economist	(P0)

Clerical Posts

Assistant Statistical Officer
Stenographer/Secretary

SENIOR TRANSPORT OFFICER (PLANNING)

1. CURRENT ANNUAL AND THREE YEAR ROLLING DEVELOPMENT EXPENDITURE PROGRAMMES

(a) To direct and supervise the compilation and updating of the annual and three year development programmes for which the Ministry is responsible. These programmes

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should be prepared by the transport agencies concerned (i.e. Malawi Railways Limited, Air Malawi Limited, Department of Civil Aviation, Road Traffic Commissioner), in consultation with the Ministry. The compilation and updating shall be done by a Professional officer. Up-to-date programmes shall be available at all times to the Ministry officials concerned.

(b) To appraise such programmes for consistency with the objectives, priorities and policies of Government. This should be done in close collaboration with Ministry officials, EPD and Treasury with due regard to project identification and appraisal in (2) below. The findings and recommendations will assist the Ministry in its decisions relating to the development programmes.

(c) To appraise the effects of the various development programmes on related current expenditures and revenues where appropriate. This should be done in close collaboration with the agencies concerned. Findings will assist the Ministry in its decisions relating to the development programmes.

(d) To ensure that the programmes are scheduled, presented and revised in accordance with the requirements of the Office of the President and Cabinet (Development Division).

(e) To monitor programme implementation with regard to budgets and other criteria, and to discuss findings and recommendations with the Ministry officials concerned.

2. <u>IDENTIFICATION AND APPRAISAL OF DEVELOPMENT PROJECTS</u>

(a) To liaise with transport agency, Ministry, EPD and Treasury officials for the purpose of identifying development projects, with due regard to requirements for project appraisal and financing.

(b) To appraise each project in terms of its socio-economic and financial implications, as may be necessary for the purpose of facilitating a decision by the Ministry concerning the future of the project. Such decisions would include the hiring of consultants to undertake detailed feasibility studies, where necessary, and the terms under which they would be hired.

(c) To direct and supervise the preparation of briefs on each project approved by the Ministry. These briefs shall be submitted to the Development Division, the Economic Planning Division and Treasury, in accordance with procedures laid down by the Office of the President and Cabinet (Development Division). Additional information shall be provided Treasury and EPD officials as necessary to facilitate project financing. The briefs and related information shall be prepared by a Professional officer.

(d) To supervise consultants hired by the Ministry for the purpose of undertaking detailed feasibility or other pre-investment studies, and to represent the interests

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of the Ministry with respect to similar transport studies commissioned by other authorities or agencies.

(d) To monitor progress in the implementation of any development project for which the Ministry is responsible or in which it has an interest. Budgets, costs and other aspects of performance, including the performance of consultants hired for detailed engineering and contract supervision, shall be subject to review. Findings and recommendations shall be reported to the Ministry officials concerned.

3. DEVELOPMENT OF TRANSPORT SERVICES

(a) To direct and supervise the preparation of traffic forecasts for all modes of transport, including road, rail, water and air. International, inter-city, rural and urban systems shall be specifically dealt with. The forecasts shall serve to indicate the essential transport requirements over the next seven years. The forecasts shall be used in the evaluation of the adequacy of existing facilities (c below) and in connection with the development programmes and projects referred to above. The forecasts shall be prepared or compiled by a Professional Officer, in consultation with transport agencies, user, EPD and other organisations involved. Findings shall be made available to the Ministry officials concerned.

(b) To collaborate with Ministry, transport agency (domestic and foreign) and EPD officials in the establishment of suitable criteria for evaluating the adequacy of existing international, inter-city, rural and urban transport facilities and services. Findings shall be available to the Ministry officials concerned.

(c) To appraise the adequacy of existing transport facilities and services. This should be done in close collaboration with the transport agencies and users concerned. Findings and recommendations shall be submitted to the Ministry Officials concerned.

(d) To analyse requests for changes in charges, licencing and other economic regulations. The review shall take into account all factors involved including transport costs, competition and markets. It shall be conducted in collaboration with transport operators, users, EPD and other organisations involved. Findings and recommendations shall be reported to the Ministry officials concerned.

(e) To review the need for better co-ordination among the transport agencies and users for expediting the movement of domestic and international traffic. Findings and recommendations shall be submitted to the Ministry officials concerned.

(f) To review the availability of reference material relevant to the foregoing tasks and recommend any new library acquisitions that are considered to be useful to the Ministry.

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SENIOR TRANSPORT OFFICER (OPERATIONS)

1. THE COMPILATION OF TRANSPORT OPERATIONS AND SERVICES

To direct and supervise the compilation and updating of costs for the principal transport operations and services, in accordance with specified standards. Towards this end the principal transport operations and services shall be identified and standards specified, with due regard to the quality and volume of services. This should be done in close collaboration with the transport agencies involved. Information about standard costs is essential in dealing with many of the problems relating to development programmes and projects and the development of transport services, including the regulation of charges.

Standard costs are required for the principal components of transport services and operations including:-

I. Line haul (between terminals) and

II. terminal operations,

with special regard to such matters as mode, type and capacity of plant and equipment and load factor.

2. OPERATING AND FINANCIAL PERFORMANCE OF THE TRANSPORT AGENCIES AND INDUSTRIES

To direct and supervise the preparation of quarterly and annual reports on the operating and financial performance of the transport agencies and industries. These reports shall be prepared by a Professional Officer in close collaboration with the agencies concerned. The scope of these reports shall include:-

i. Traffic movements between terminals and traffic backlogs and delays at terminals, including ocean ports and other transfer terminals.

ii. The utilization, productivity and costs of labour, plant and equipment for the various transport operations and services.

iii. A comparison of operating and financial targets with actual performance.

Findings and recommendations shall be submitted to the Ministry officials concerned.

3. FUTURE CAPITAL AND MANPOWER REQUIREMENTS OF TRANSPORT AGENCIES AND INDUSTRIES

(a) To direct and supervise the compilation of estimates of the capital and manpower requirements of the transport agencies and industries over the next five to seven years. This work shall be done by a Professional Officer, in close collaboration with the agencies concerned. The results shall serve as a basis for the review in (b) below.

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7. To review the plans of the transport agencies for [illegible] and to assess the manpower requirements. Findings and recommendations shall be reported to the Ministry officials concerned.

With regard to the foregoing tasks, the STO (Operations) shall review the availability of relevant reference material and recommend any new library acquisitions that be considered to be useful to the Ministry.

PROFESSIONAL OFFICERS/ECONOMISTS

With regard to each one of the task outlined below, the Professional Officer will be subject to the supervision of a senior officer. However, he will be expected to show an increasing amount of initiative in the organisation and planning of his work, and in the direction and supervision of any clerical assistants. He will be responsible for the preparation of charts and tabulated material to support his reports. His tasks may be outlined as follows:-

1. To compile and update annual and three year development programmes, under the supervision of STO (Planning), as outlined under task B 1a.

2. To prepare briefs on all development projects approved by the Ministry, under the supervision of STO (Planning), as outlined under task B 2c.

3. To prepare traffic forecasts for all modes of transport including road, rail, water and air, under the supervision of STO (Planning) as outlined under task B 3a.

4. To compile and update the costs for the principal transport operations and services in accordance with specified standards under the supervision of STO (Operations) as outlined under task C 1.

5. To prepare quarterly and annual reports on the operating and financial performance of the transport agencies and industries, under the supervision of STO (Operations) as outlined under C 2.

6. To compile estimates of the capital and manpower requirements of transport agencies and industries, under the supervision of STO (Operations) as outlined under C 3a.

7. To prepare a periodic and concise report on all aspects of transport development relevant to Malawi for the information of Ministry officials. This shall be done under the direction of the Principal Transport Officer.

8. To liaise with the National Statistical Office on all statistical matters of mutual concern.

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Telegrams: TRANSCOM, Lilongwe 3
Telephone: Lilongwe 30122
Communications should be addressed to:
The Secretary for Transport and Communications

MINISTRY OF TRANSPORT
AND COMMUNICATIONS
PRIVATE BAG 322
CAPITAL CITY
LILONGWE 3
MALAWI

4th June, 1984

The Project Officer
U.S. A.I.D.
P.O. Box 30455
LILONGWE 3.

Attention: Mr. P. Cook

Dear Sir,

MALAWI COMMERCIAL TRANSPORT PROJECT

Please find enclosed a copy of a draft proposed Agreement between Malawi Government and the Republic of Tanzania concerning international road transport. The overall objective of this exercise is to facilitate the movement of Malawi external trade in transit countries. In the final analysis it is our objective that similar Agreement should be entered into with all transit countries in the subregion. You may also wish to be informed, for the Agreement with Tanzania has already been signed.

I would also like to confirm that once the equipment has been acquired, all Malawians involved in transport will have equal access.

Yours faithfully,

T.M. Kaunda
For: SECRETARY FOR TRANSPORT AND COMMUNICATIONS

Enc.

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ANNEX F-3

Description of M.I.T.C.O.

MALAWI INTERNATIONAL TRANSPORT COMPANY (MITCO)

APPROVED TERMS OF REFERENCE FOR THE ESTABLISHMENT OF MITCO AS A MALAWI ROAD AND ROAD/RAIL INLAND TRANSPORT CARGO BOOKING AGENCY

In its efforts to cope with the continuing transit transoirt difficulties arising from the weakness and failure of its traditional railway access routes to the sea, the Ministry of Transport and Communications has initiated a three-part program for strengthening Malawi's international road haulage capabilities and capacity. A key element in this program is the formation in Malawi of a "road/rail inland transport cargo booking office". There have been a number of meetings within the Government and with key individuals and organizations in the private sector where the concepts and modalities of this proposed office have been discussed at great length, starting from an original proposal advanced by the Ministry of Transport and Communications in June, 1983. The following outline represents a concensus of these discussions as approved by the special committee of the International Transport Committee and the Ministry of Transport and Communications.

1. Government Objectives - in seeking the formation of this organization are to:

A) Improve the performance and reduce the over-all national costs of inland road and road/rail transit transport services, with particular attention to foreign exchange implications.

B) Assist in ensuring the supply and availability of adequate locally-controlled road and road/rail transport capacity to meet essential requirements of volume import and export cargoes.

C) Improve access by Malawian transporters to Malawi's own import traffic.

D) Improve the performance and reliability of essential road/rail transfer operations, and in reducing their costs, at Lusaka, Harare and elsewhere as may become necessary.

2. Method of Achieving these Objectives - The Ministry of Transport:

A) Accepts the concepts of MITCO as a specialized privately-financed and operated organization independent of the Government, and operating under normal open, competitive market conditions to function as an international road and road/rail cargo booking office.

B) Desires information and reporting services to facilitate making the most effective use of available routes, services and facilities.

C) Wishes to monitor actual performance at key transfer points.

D) Will encourage the use of Malawi transporters, support their financial viability, and endeavor to increase their capacity to carry reliably their fair share of available traffic.

E) Will cooperate with the National Transport Committee action forum in directing and routing traffic so as to prevent avoidable traffic congestion and bottlenecks.

F) Will require that transporters based in Zambia, Zimbabwe, Botswana, Tanzania and the Republic of South Africa be utilized as necessary to maintain a balanced fleet with equitable participation by haulers based in each country transited in proportion to the volume of traffic over each route and with regard to any relevant bi-lateral or multi-lateral agreements that may already exist or come into force.

G) Expects MITCO to observe the pricing, accounting and contracting procedures previously agreed upon, including the right for periodic Ministry of Transport and Communications inspection.

H) Will permit the establishment of staging areas where import cargoes can be condigned C.I.F. for onward inland transport under Malawi control.

3. Specific Cargo Booking Office Assignments - The Government and the Ministry of Transport expects the Malawi International Transport Company (MITCO) to:

A) Operate a traffic booking agency (imports and exports) on behalf of haulers under contract to it, and for such other organizations as may wish to participate.

B) Assume full responsibility for organizing, contracting for, and managing a specialized road tanker fleet as required for the import or petroleum fuels by road.

C) Place under long-term haulage contracts sufficient road transport capacity to meet at least half of the minimum anticipated dry cargo import requirements.

D) Coordinate front and back-haul trips as closely as practicable in the interest of improving vehicle utilization and reducing costs.

E) Develop and use transport contracts and other arrangements designed to encourage improved performance and reliability by individual haulers.

F) Work with traders and transporters to develop and implement practical methods for spreading large volume cargo movements so as to avoid excessive traffic congestion and to make more effective use of available capacity.

G) Settle current accounts with transporters without undue delay upon receipt of invoices and proof of delivery.

H) Limit the extension of credit to customers who are slow in settling their accounts.

I) Establish its headquarters office in Lilongwe with representation elsewhere as may be necessary to oversee its operations.

J) Not engage in customs clearing, insurance, representation and other type of C 7 F agency activities; except that it may engage in consolidation and inland forwarding as required by assignment given herein or requested by the Ministry of Transport and Communications.

4. Other Matters - Relevant to the establishment and operation of MITCO, and operations of other Malawi-based international transporters and agencies offering similar services:

A) International rates and charges will not be subject to Government regulations.

B) In the allocation of its own traffic, the Government will favor organizations which consistently respect the objectives and methodologies outlined herein.

C) The Ministry of Transport will join negotiations with the Reserve Bank by MITCO, transporters and clearing and forwarding agencies for the establishemtn of acceptable foreign exchange release arrangements for the payment of international transport charges. In these negotiations preference will be given to those who can supply the Reserve Bank with a continuing six-month forecast of anticipated foreign exchange requirements for use as a basis for planning the allocation of available resources. This forecast should be revised and a new month added at the end of each calendar month.

D) It is the express intention of the Government that MITCO shall not be monopoly, and that other Malawi-controlled organizations are free to engage in our offer for similar services.

Ministry of Transport and Communications, Lilongwe, Malawi on January 20, 1984.

ANNEX F4

MALAWI COMMERCIAL TRANSPORT PROJECT: TRAINING PROGRAM DETAILS

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ANNEX F4

MALAWI COMMERCIAL TRANSPORT PROJECT:

TRAINING PROGRAM DETAILS

INTRODUCTION

A. Background

The Malawi Commercial Transport Project is designed to expand and develop the international trucking industry in Malawi. Ironically, the long standing protectionist policies which have favored more economic transport by rail have also contributed to the weakness of the trucking industry in Malawi, and have lead to the present domination of international haulage by foreign trucking firms. Structurally the Malawian trucking industry concentrated on to domestic haulage, entry into which has been relatively easy. Operators have often lacked the capital, management skills, or mechanical training necessary to maintain viable businesses, however, and there has been a high failure rate. Nevertheless there are Malawian firms in the business and - with international experience and equipment. Recently the domestic market has been depressed by a surplus domestic capacity which has made it difficult to maintain a profitable operation on the basis of domestic haulage alone, and many firms have expressed interest in international haulage.

Clearly the training necessary in order to evolve an international capacity for the Malawi trucking industry is complicated by the present structure of the industry, the existing level of skills, and the immediacy of the time-frame within which project impact is desired. The effectivenesss of the training program provided under the project will be dependent upon its responsiveness to the respective needs of each operator. Particular attention must be given at all stages in the training program to evaluation and monitoring as well as overall coordination.

B. Methodology

The methodology used to design the training program for this project followed the following steps:

1. Establishment of the basic assumptions concerning Malawian requirements for commercial truck transport in both short and medium time frames;

2. Projection of basic manpower requirements associated with the above assumptions;

3. Assessment of training needs on the basic of skill differentials;

4. Identify and evaluate the capacity of existing training facilities and institutions relevant to the provision of the training for skills identified;

5. Identify the technical assistance required to supplement existing facilities;

6. Identify requirements for training equipment;

7. Investigate training resources likely to be available through the activities of other donors;

8. Establish instructional components and responsibilities; and,

9. Specify linkage mechanisms for coordination, monitoring and evaluation.

C. Assumptions

The following assumptions were made in the preparation of the training program design:

- The need for international road transport is likely to continue well beyond the immediate problems with rail transport, and 40 percent or more of Malawi's external trade will have to be moved by road;

- In order to facilitate entrance by domestic carriers into the international market selected umbrella groups will provide certain services;

- The umbrella groups are also to serve as supplemental training forums for those carriers operating under them with the option of self-sufficiency as one objective; and,

- Within the structure of the project, preference will be given to the participation/owner operators with experience in international transport.

- Malawi possesses a sufficient base of human and institutional resources to develop an international commercial transport industry.

- Domestic carriers lack the maintenance, management, and operational skills necessary for viable international haulage of goods.

II EXISTING FACILITIES AND INSTITUTIONS

A. The Polytechnic

The Malawi Polytechnic, established in 1965 is the main center for technical education at the tertiary level. Conceptually the institution originated in the early 1960's when the then Nyasaland Government gave high priority to the provision of courses in practical vocational, technical and commercial skills, as well as in adult education. In 1962, AID authorized a grant of $3.1 million to assist in the construction of the core campus, supplying furniture and equipment, providing scholarships in the U.S. and technical assistance from the University of Southern California (USC). Subsequent AID assistance has included additional construction -- including a new library -- participant training and technical assistance keyed to upgrading the professional engineering program at the Polytechnic.

Originally, the Polytechnic had two purposes, first, to offer full-time courses in commercial and mechanical subjects and second, to offer part-time courses in various subjects, including apprentices' training and evening adult classes for those already employed. The educational program provided courses in the building trades, auto mechanics, sub-professional engineering, business and commercial studies, the latter being a basis for more advanced professional and academic training abroad. It was always envisaged that the Polytechnic should offer technical education at the highest possible level, approriate to the needs of the country and to the educational attainment of its potential enrollment, and a broad range of diploma and certificate programs have evolved.

The Polytechnic has recently undergone modification of its organizational structure. It remains linked to the University of Malawi but with considerable autonomy. It is headed by the Principal who is directly assisted by various administrative departments. Instruction is provided by three faculties each of which is headed by a Dean (See Figure F4-1 Polytechnic Organizational Chart, May 1984). Each of the faculties is currently comprised of three departments. The number of full-time teaching staffing as of May 24, 1984 was 150.[1]

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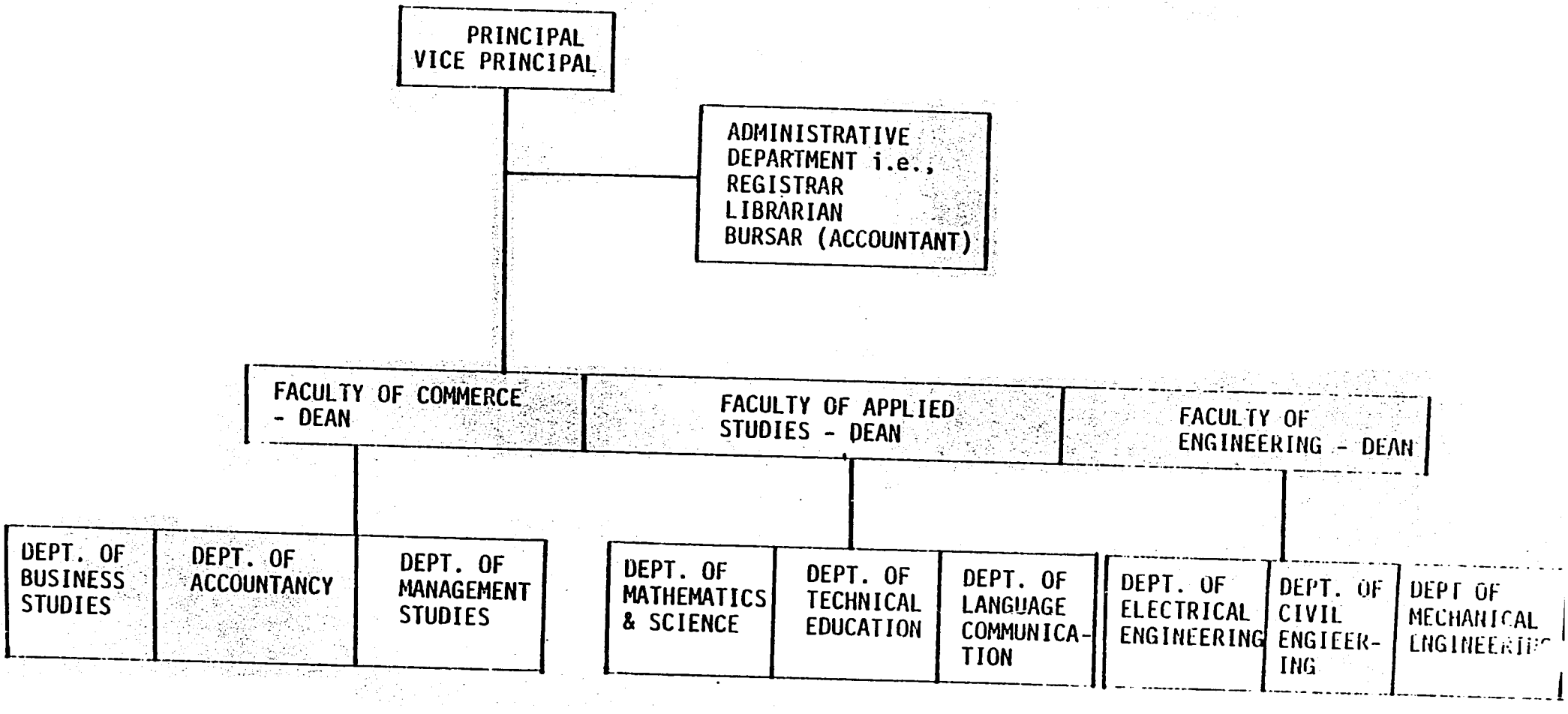
1 The Polytechnic Calendar is divided into a year of three terms running from Mid September to the end of July.

FIGURE F4-1

THE POLYTECHNIC ORGANIZATIONAL CHART



TOTAL NUMBER OF FULL-TIME TEACHING STAFF AS AT 24TH MAY, 1984 IS 150

The Department of Business Studies offers a three year course leading to a Diploma in Business Studies; the program includes courses in economics, accounting, English, law and human behavior. (See Figure F4-2 Concise Program for Diploma in Business Studies, Malawi Polytechnic, 1984). The Department of Mechanical Engineering offers a four year program for Motor Vehicle Technicians based on practical and theoratical training which is split between Part I and Part II levels, each of two years in length. (For a sample of workshop course content for the first term of the first year of Part I See Attachment F4-1). The newly engaged Department of Management Training offers a two year course leading to a Diploma in Management as well as in series of short seminars on selected topics. (For a discussion of the course content of the regular purpose and short courses see Attachment F4-2).

B. DEMATT

The Development of Malawian Traders' Trust (DEMATT) was initially assisted shortly after its creation by funding provided to Private Agencies Collaborating Together (PACT) by AID. The assistance was provided by Partnership for Productivity International (PFP), a member of PACT. This initial assistance which took place between 1978-1981 was instrumental in getting DEMATT established, becoming fully operational and testing out various methods of promoting the growth of indigenous small businesses in Malawi. AID has recently commenced a second phase project with DEMATT to expand its program and make the organization financialy more self-sufficient.

DEMATT is officially registered under Malawi's Trustee Incorporation Act and presently falls under the juridiction of the Office of Statutory Bodies. It receives a portion of its operationing budget from the Government of Malawi's budget. It is Government's intention to gradually phase this subsidy out. It is the intent of all concerned that DEMATT should mature as a self-sustaining permanent private sector Malawian institution. DEMATT is now actively pursuing this objective.

The structure and function of the DEMATT program evidences PFP's involvement in its development and resembles program which PFP has successfully commenced in Kenya and Botswana. At the core of the program is the establishment of a Business Advisory Service (BAS) which provides extensive services to local businessmen at their places of business on a one-to-one basis. This is supplemented by special training classes prepared on the basis of shared training needs. The BAS is provided through a set of business advisers placed in field locations throughout the country. These advisors are assisted by area supervisors (See Figure F4-3. DEMATT Organizational Chart). The basic approach provides that the advisor and client together:

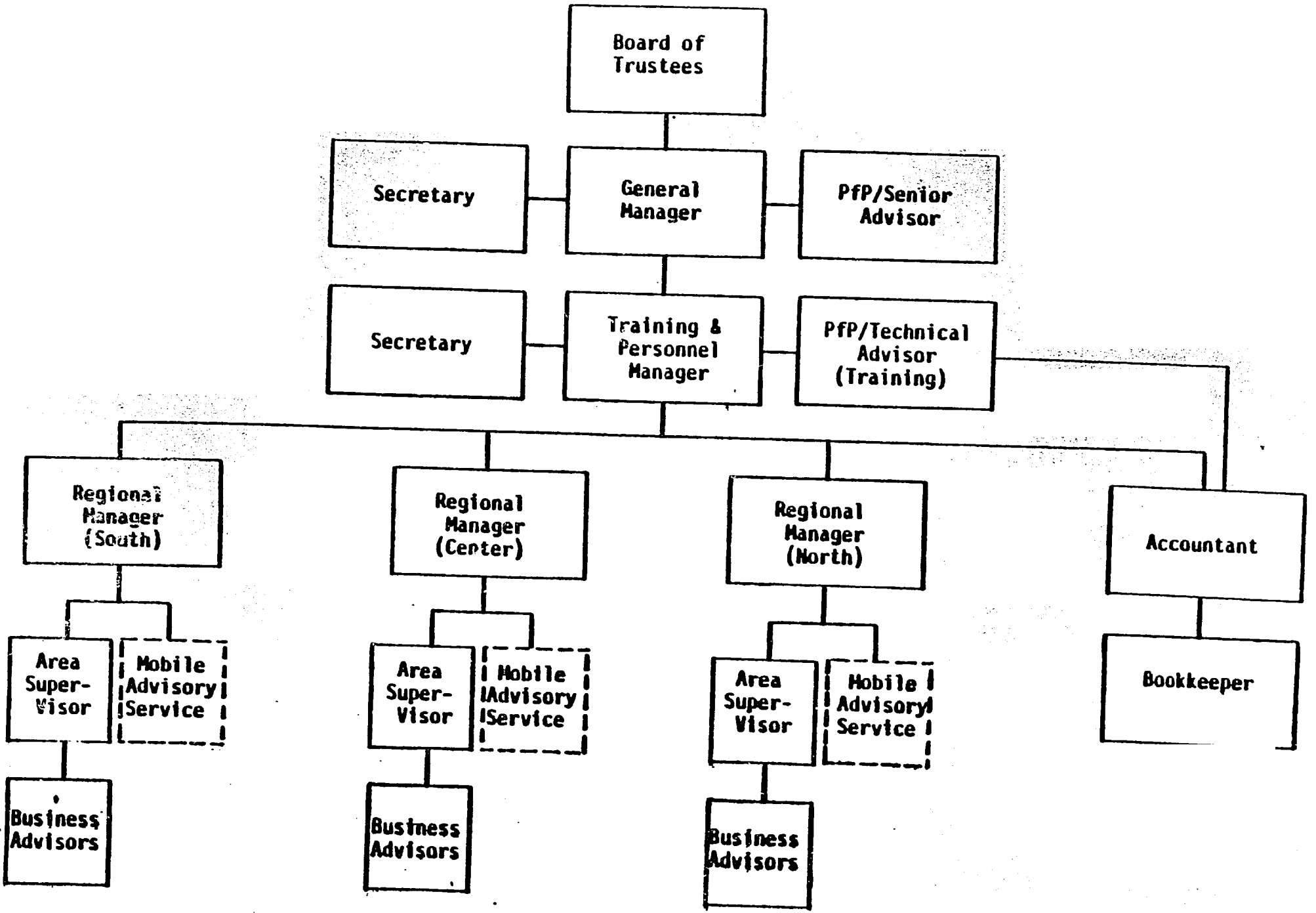
FIGURE F4-2.

Course Program for Diploma in Business Studies
Malawi Polytechnic, 1984.

Year 1	English 4	Economics 5	Law 4	Accounts 5	Maths 4	Human Behaviour
Year 2	English 4	Economics 5	(i) Accounts 3 (ii) Financial Accounting and Taxation	Law 4	[illegible]	
Year 3	English	Business Adm. 4	(i) Accounts 5 (ii) Auditing and Costing	Law 4	[illegible]	

FIGURE F4-3

DEMATT ORGANIZATION CHART



- Develop a market profile (see Appendix A);
- Develop a personal profile of the client and of his/her business (see Appendix A);
- Identify major business-related problems the client is experiencing;
- Identify solutions, formulate appropriate business objectives and design a plan for achieving agreed-upon objectives; and,
- Review progress, teach new skills and update plan for achieving objectives.

DEMATT currently has 14 advisors in place (see Figure F4-4: The Development of Malawian Traders Trust 5-year staffing schedule), and is training an additional 8 business advisors beyond the initial target. To date about 500 clients have been reached and DEMATT projects a 5 year target of 5,000 clients. (For an outline of the training course provided by DEMATT for all business advisors see Attachment F4-3).

C. MALTRACO

As the in-country supplier and service agent for Caterpillar and Mack, MALTRACO has established a comprehensive training program. This program is keyed to the mechanical operation of heavy vehicles in general, as well as to the specific vehicle in use by each client. The issue of preventive maintenance has been incorporated as a key concept in this training. It involves theoretical and practical training and the extensive use of audio-visual materials. Each trainee is provided with printed materials which he can keep as a reference guide upon completion of his training. The training center is housed within the MALTRACO service center, providing ready access to the workshops and exposure to actual services, maintenance, and repair operations.

Various training formats are used. The most common is a three-day session which gives a general but complete introduction to heavy vehicle mechanical and electrical systems. MALTRACO encourages clients to attend a more comprehensive version of this course which requires a full eight weeks. This program is modularly structured so any section in itself and various modules can be packaged together. (For an example of the short and long courses offered by MALTRACO see Attachment F4-4 showing training prepared for Press Transport). Specialized programs are prepared by MALTRACO and participants are encouraged to return for refresher courses as frequently as they wish. Training is also given in driving each vehicle including up to several day on-the-road supervision.

The provision of such a supplier training program would be required of any supplier funded under the project. The experienced position held by MALTRACO in mechanical training, however, represents a special in-country resource which has been incorporated into the design of the training program discussed here and is discussed under Section V.

FIGURE F4-4

THE DEVELOPMENT OF MALAWIAN TRADERS TRUST 5 YEAR STAFFING SCHEDULE (LOCAL STAFF ONLY)

JOB TITLE	PRE-SENT#	YR 1	YR 2	YR 3	YR 4	YR 5
General Manager	1	1	1	1	1	1
Personnel/ Training Manager	0	1	1	1	1	1
Regional Managers	2	3	3	3	3	3
Accountant	1	1	1	1	1	1
Area Supervisors	3	2	0	0	0	0
Business Advisors	13	14	14	6	4	0
Mobile Supervisors	0	2	4	6	6	6
CAAS Staff	0	0	0	6	8	12
Bookkeeper	1	1	1	1	1	1
Personnel Clerk/Secretary	0	1	1	1	1	1
Secretary	1	1	1	1	1	1
Copy Typist	2	3	3	3	3	3
Messenger	2	3	3	3	3	3
Office Driver	0	0	1	1	1	1
Watchmen	0	1	1	1	1	1
TOTAL	26	34	35	35	35	35

D. Other Potential Organizations for Training

Following recent managerial reorganization, Press Transport has undertaken the preparation of an in-house training program for its staff. MALTRACO has assisted with training relative to mechanical skills, but the Press program includes a comprehensive package of management, financial and operation training conceptually similar to the design requirements for training of the commercial sector as a whole. Press sees its program as in an evolving state, reflecting the dynamics of the program, but is extremely pleased with the response of its staff to the training. Press has been identified as one of the umbrellas to cover owner-operators. Access to the in-house by these Press training program owner-operators seems uncertain and requires additional consideration, but the program would at least seem a model for other umbrellas and useful to the design of training under the auspices of the Polytechnic.

The transport sector analysis for this project has recommended the use of heavy capacity goods vehicles the configuration of which would involve either articulated or drawbar trailers. These vehicles require a somewhat more sophisticated set of skills compared to a straight truck, raising the issue of driving training for international haulage. Driver training schools are generally accessible to the average Malawian. These schools are certified by the Road Traffic Commission (RTC). They provide training on the basis of a highway code symbol board and in-vehicle training. Written materials are not used for training drivers. Although they are qualified to provide training for heavy goods vehicles, none of the schools has a articulated vehicle (Class F, i.e. tractor and tractor body and trailer) and they normally use a 7 tonne straight truck (Class G, goods vehicle) for training purposes. Special arrangements can be made on an ad-hoc basis for Class F training by certain schools. (A sample of training programs and costs provided by the Pemba School of Driving is provided as Attachment F4-5).

III MANPOWER REQUIREMENTS

The identification of manpower requirements for the trucking industry on the basis of existing analysis is complicated by two factors. The first is the rather broad perspective of the studies which have been made of Malawian manpower requirements. The first survey was conducted in 1971 and the second, and most recent survey was in 1979. Associated analysis has been undertaken by the IBRD but these also reflect broader issues than either transport or trucking.[1] Discussions with Personnel Management and Training in the office of the President and Cabinet indicate, moreover, that the 1979 survey is not considered especially relevant to policy making.[2]

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1 Full citations are provided in the bibliography; particular note should be made of the paper by N. Shields. The reader should also note the existance of various internal GOM manpower reviews.

2 Reference to Management training needs in Malawi is included in a brief section of the survey conducted by ESAMI cited in the bibliography.

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The second factor affecting manpower analysis relates to the shifting transport situation in which Malawi finds itself. Until the failure of international rail routes via Mozambique there was little economic justification for international haulage by road for external trade. Even if a manpower analysis of the trucking sector had been undertaken it would not reflect current needs.

For the purpose of the training design, manpower requirements were based on the projection of a Malawian commercial fleet of about 120 heavy capacity vehicles/units. Since some enterprises and operators have been engaged in international haulage, a residual level of skills can be assumed, quantification of manpower, requirements is further restricted by the uncertainty over the final mix of large/mid-sized firms/owner-operators. This final mix will largely be a function of future financing opportunities for vehicle purchase.

As an expedient, training needed to meet manpower requirements has been based on recommendations provided by the Ministry of Transport and Communications (MOTC). Accordingly about 200 individuals should receive training. The categories and numbers are as follows:

- Operations managers/planners	4
- Owner-operators	25
- Vehicles operators/drivers	100
- Operations supervisors	10
- Maintenance planners	4
- Financial managers	10
- Terminal supervisors	10
- Loading/unloading supervisors	30

These numbers do not include the need for cross-training, i.e., training in more than one area, especially for owner-operators. When this is taken into account the MOTC estimates the number of individuals requiring training on the basis of skill categories would be as follows:

- Long distance driving techniques	140
- Loading techniques	165
- Preventive maintenance planning and organization	33
- International operations (Laws, Regulations, Procedures, Documentation etc.)	140
- Terminal operations	14
- Financial record-keeping	35
- Costing and pricing	35
- Financial management	35

The consultant has used these figures as an order of magnitude for budgeting purposes and general program design. For maximal effectiveness, however, training should be keyed to actual needs assessment. A preliminary needs assessment is discussed in Section IV and further comments concerning incorporation of this approach into program design is included in Section V.

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IV NEEDS ASSESSMENT

Before the arrival of the consultant USAID had prepared a questionaire to assess the training needs of operators who had already gained experience in international trucking and had arranged for administration of a survey by a joint team representing DEMATT and the Polytechnic. The teams divided the initial version into a written section for advance mailing and a guide for personal interviews. (See Attachment F4-6 and F4-7). The consultant prepared a more simplified version (See Attachment F4-8) which was intended to indicate operational performance which was also used in the surveys. The consultant participated in the administration of two of the nine personal interviews. (For a summary of the results and list of firms interviewed see Attachment F4-9).

All of the firms interviewed were interested in international haulage. Only one of those interviewed was currently engaged in training. Seven firms indicated an interest in having a training program for employees, but their ideas about their needs and the structure such a program should take were not wel articulated. All had incentive plans for employees. Varying degress of sophistication were inevidence in regard to cost accounting, rate calculation, and overall financial management. Most firms cited difficulties in international haulage in regard to permits, foreign regulations, and deadheading (empty backhaul). Individual variations reinforced the utility of individualized need assessment but supported the general categories of skills suggested in Section III.

V TRAINING PROGRAM

A. Approach/Methodology

The approach used in the development of the training program took into account the social, economic, and political environment of the firms and their staff. Specifically, the approach included the following considerations:

- Although a mix of training components is to be utilized, on-the-job training is regarded as the most effective learning situation and its use should be maximized throughout the program;

- Classroom instruction should utilize simulation, role playing, case studies and practice exercises keyed to the realities encountered by operators in international haulage;

- Use of existing forward and nonforward training institutions should be maximized by the program design, with particular attention being paid to complementarity and long-term institutional growth;

FIGURE F4-6

TRAINING

Areas of Specialization for
Program Development

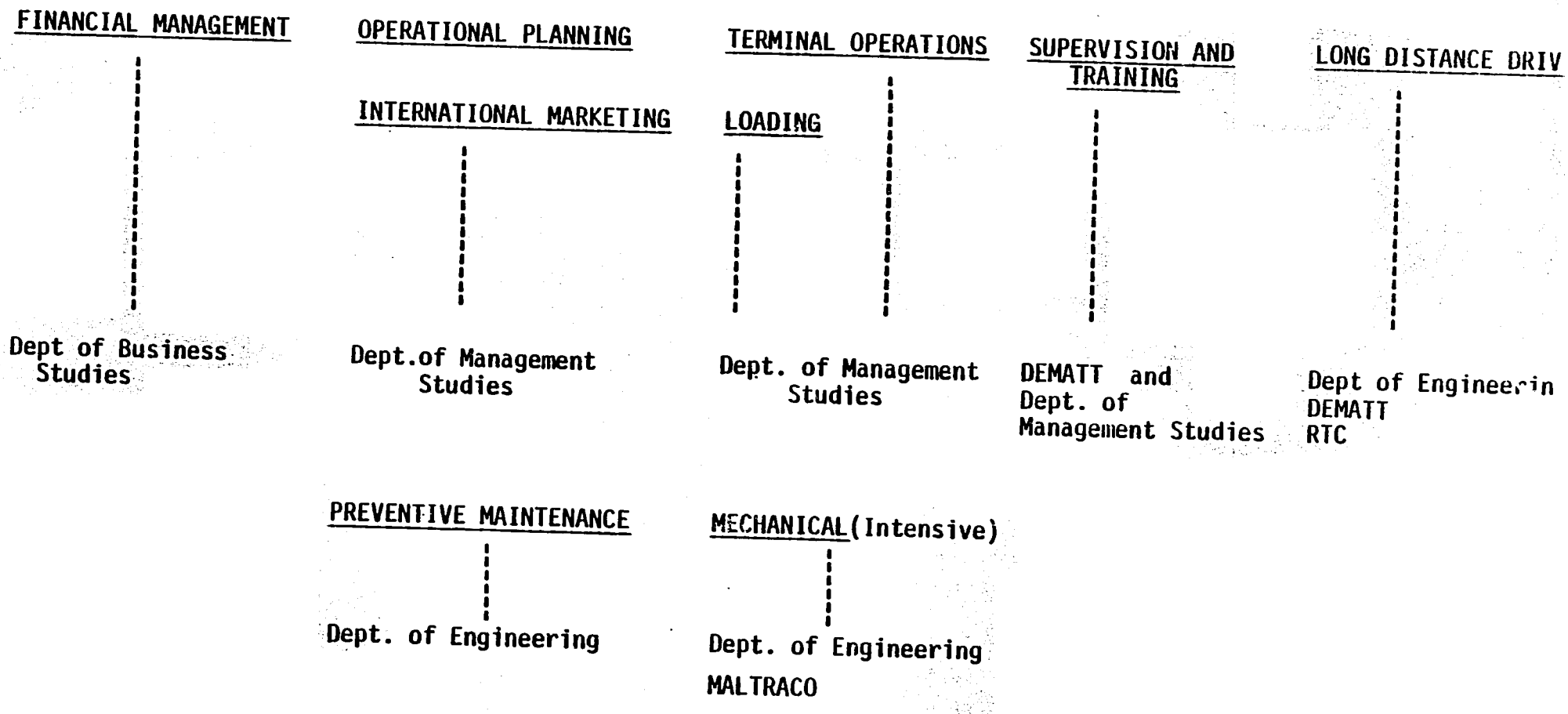
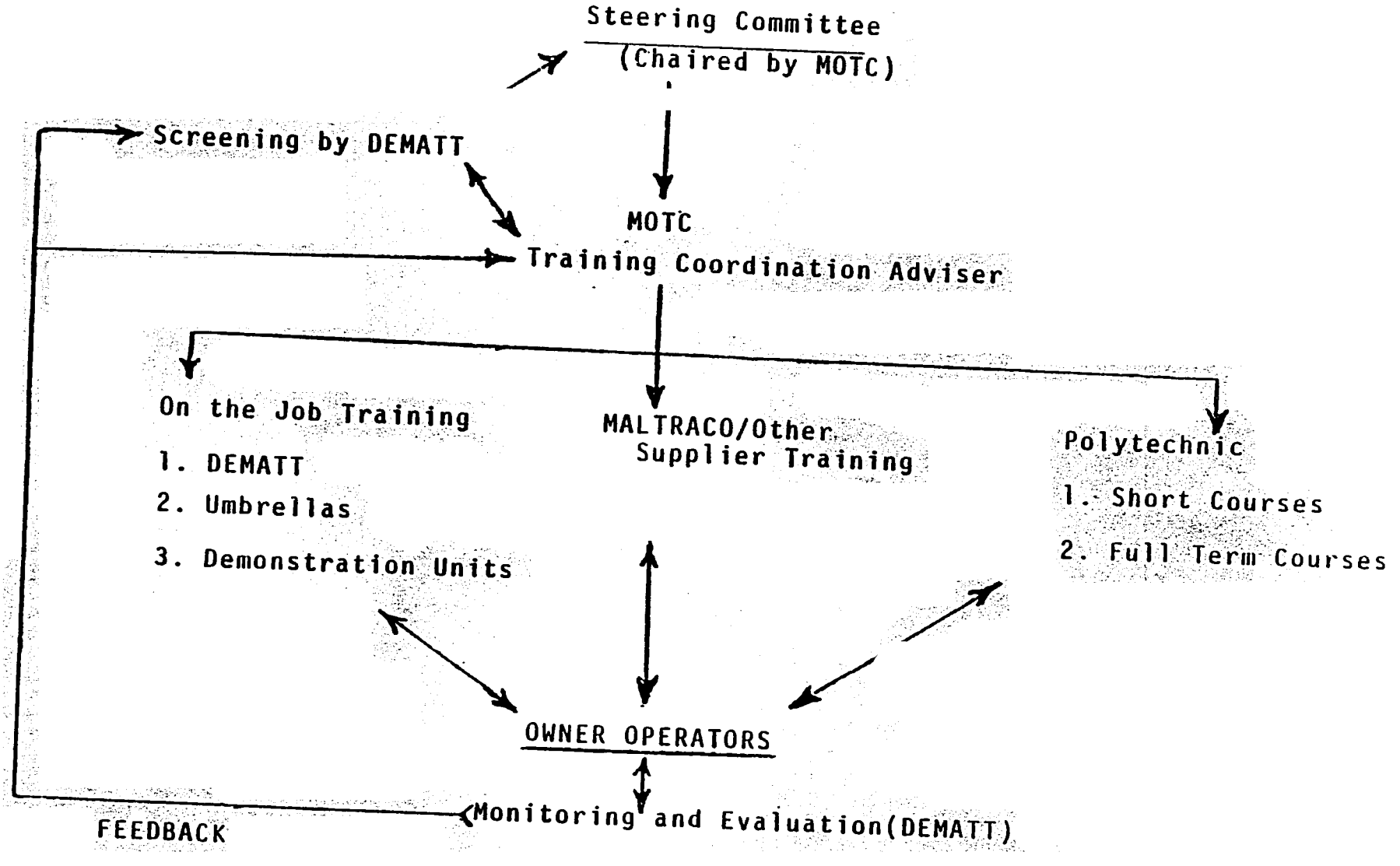


FIGURE F4-7

Linkages in the Training Program



- The training for each individual or firm should be based on a needs assessment specifically structured for the individual, or unit or firm;

- Trainees should actively participate in all phases of training including the initial needs assessment and definition of goals;

- Training should be set within the context of a learning process rather than simple skill mastery;

- In order to be effective, learning involves attitude changes and linkage to such personal and concrete values of the participants as increased productivity and profit;

- Learning should be seen as a continuous process;

- An essential aspect of all learning is the existence of feedback mechanisms including assessment, monitoring and evaluation, and these elements must be integrated into all aspects of program design;

- Since the possession of oral and written skills in English has been generally established as a pre-requisite for international operators, this criteria must be fully defined and incorporated into the training program at the beginning;

- Considerable attention must be given to the preparation and use of written and audio visual teaching materials;

- To maximize flexibility, instruction should be based on modular units;

- The impact of technical assistance on counterpart training should be maximized through a monitoring program;

- Where applicable, supervisory personnel should be trained to subsequently serve as trainers;

- In the case of most small operations, cross-training will be necessary in training a person to do more than one job;

- The commercial orientation of the project should be used as a training guideline with the eventual goal by the end of the project of training costs being covered by fees charged or transfers from local currency generation; and,

- Should other sources of training evolve (including transporters already in the market or transporters who have received training early in the project) a flexible response should be followed to incorporate them into the training design.

B. Basic Components

The training program envisioned for the project contains seven different but interrelated components. Included are:

Supplier training - Although supplier training is usually considered a descrete activity, its importance to the effectiveness of fleet operations for an evolving international Malawian fleet largely based on newly-acquired vehicles makes it necessary here. Any equipment or audio-visual aids funded under the project should reside in the supplier's permanent training facility, including workshop and audio visual facilities for at least the life of the project. This must include an intensive program to be offered twice a year and a shorter program of at least three days to be offered more frequently. The supplier will cooperate with the Polytechnic and DEMATT in developing joint programs, as well as assist the training needs of the umbrella organizations. A resident trainer is expected to be provided in conjunction with each training program offered by suppliers.

On-The-Job Training - Training within the site of actual operations is the preferred method for learning. This is to be an extension of DEMATT screening and monitoring with various sources selected to perform on-site instruction. In the case of enterprises having several employees, supervisors will be trained to carry out such instruction. Where possible, supplier personnel and umbrella organizations will be asked to give selected assistance to this process. Limited support for umbrella training programs is included.

Short Courses and Seminars - One of the initial tasks of the Polytechnic will be to develop short courses and seminars keyed to the skill requirements already dicussed and further identified in the next subsection of this report. These are to be similar to the three day seminars recently held by the Department of Management (See Attachment F4-10) on Export Marketing.

Demonstration Units - Demonstration units are to come primarily from the Polytechnic but other sources are to be used as well. They will be either a supplement to on-the-job training or provided on a group basis for participants from more than one firm.

Full-Term Courses - The Polytechnic is to evolve courses a full term in length, or a major portion thereof. These may include demonstration units or even be handled in certain cases as correspondence courses should such seem advantageous.

Internship - The concept of an internship is a variation on on-the-job training but provides for maximization of existing skills and facilities as sites for learning. These are expected to be of varying lengths.

Overseas Training - Overseas training has been identified in the form of Assembly plant/supplier training of three to six weeks for a mechanic from each of the umbrella organizations and one of the instructors from the Polytechnic.

The schedule for program implementation is projected in Figure F4-5, but this must be regarded as a fluid process. Program implementation must be meshed with the actual date of start-up, the corresponding point in time of the Polytechnic calendar, and the status of vehicle procurement. It will also depend on input from the screening and needs assessment to be provided by DEMATT. Certain tasks have been identified as preparatory actions. DEMATT screening and financial packaging could well begin during this stage. One of the initial actions of the Training Coordinator/Advisor will be to define the implementation schedule during months one/and two. This is not expected to be a one-time action but rather a progressive and continuous activity feeding into project evaluation. Similarly, the Documentation Search feeds into curriculum and syllabus development. The Training Coordinator/Advisor will also have to identify and schedule short term technical assistance requirements at an early point in project start-up, but actions relative to this requirement should be part of the advance preparation.

In order to facilitate start-up, it is proposed that a Training Mobilization Adviser be included under the short-term technical assistance component of the project. This would allow mobilization to begin even before month one of the training program. In such a case an implementation workshop. The implementation plan assumes that the TCA is in place, but use of a Training Mobilization Advisor could serve as an integrating bridge if the recruitment and arrival of the TCA proves an unnecessary delay. It is important that the Training Mobilization Adviser be familiar with the institutional setting, the rationale for the project, and the approach to training including the training program design.

Conceptually DEMATT is to serve as an initiating agent by screening participants and assessing their training needs. This assumes a publicity campaign to inform potential participants about the project and activate interest. Screening should not be limited to those expected to immediately enter international commercial trucking. Certain of those

screened will require assistance from DEMATT with either a financial package to purchase of vehicles (either INDEBANK or another source) or a review of their financial viability. Participants are then to be provided a specialized training program drawing on the full range of training components discussed above. Component selection by DEMATT will be based on the individual needs of each participant. In certain cases DEMATT will serve as the trainer, using its business advisers or other staff members. It will also assist in programing on-the-job training to be provided by other sources including demonstration units by the Polytechnic as well as assist in monitoring and evaluating all training provided under the program. (See Figure F4-7 for a graphic portrayal of this interaction.)

The Polytechnic is to first develop short courses and seminars with participant selection, aided by DEMATT, which will also help evaluate the effectiveness of the courses. As a follow-on phase, demonstrations and internships will be instituted by the Polytechnic. Continued monitoring and evaluation by DEMATT will lead to full term courses which may include demonstrations or other non-classroom features.[1] Both the Polytechnic and on-the-job training by DEMATT is to be assisted by short-term technical assistance under the direction of the Training Coordinator/Advisor.

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1 The consultants discussed various options with the Polytechnic concerning the development of a single certificate for road transport courses, a unified diploma program, or absorption into the existing program. This issue is important in terms of long-term institutional growth and requires additional consideration.

The MOTC has expressed willingness to assist in arranging the use of facilities for training by the Polytechnic in Lilongwe. It is not anticipated that the Polytechnic would operate full term courses outside its facilities in Blantyre, but space for short courses and seminars might be required on a temporary basis. The consultant as discussed the absorption capacity of the polytechnic with representatives of the departments concerned and no problems are anticipated. The provision of classroom space for driver training under the RTC may require additional consideration.

Figure F4-5 Program Implementation Schedule

Item	Project Month	Task
1	N.A.	Advance Preparation
		Activation of Interest
		Preliminary Screening
		Designation of Steering Committee
		Identification of Outstanding Issues
		Identification of TA Source Options
		Clarification of Role of Umbrellas
		Documentation Search
		Training Mobilization Adviser
2		Start-Up
	1	Training Coordinator (TA) in Place
	1	Mobilization Session
	1+	Screening and needs Assessment
	1	Identification/refinement of Short-Term TA requirements
	1-2	Refined Training Schedule
	1-2	Refined Curriculum and Teaching Materials
	1-2	Preliminary Review and Ordering of Equipment
3	2-3+	On-the-job Training and Monitoring
4	2-3+	Short Course and Evaluation
5	4+	Demonstration Units
6	3+	Internships
7	6-9	Full-Term Courses and Evaluation
		(items 3-7 to be repeated as workable)
8	12	Program Evaluation I
		Evaluation Session
		Import Institutional Growth
		Structural/Functional Modifications
9	13-24	Program Run,3-7
10	24	Program Evaluation II (As 8)
11	25-26	Program Run, 3-7
12	32/34	Identification of Follow-on Requirements
13	35/36	Program Evaluation III

Note: + indicates an ongoing activity

On-the-job training, demonstration units, and short courses are expected to be on-going but the full-term course will be keyed to the academic calendar. The use of the period between August and Mid-September when the Polytechnic is not scheduled should be given consideration. Overall program evaluation is scheduled for project month 12. This is the pressing responsibility of the Training Coordinator with the assistance of DEMATT and the Polytechnic. This is to be followed by a program run based on the conclusions of the evaluation. Subsequent evluations are scheduled for project months 24 and 35/36. Prior to the final evaluation, follow-on requirements are to be identified.

The establishment of training in support of requirements for certification for international road service permits will require the cooperation of various bodies and be a particular concern of the TCA. For this reason it is proposed that he possess experience in vehicle licencing and inspection and be housed in the office of the RTC. Should this demand be too ristricted he is to be assisted by a short term adviser. The Polytechnic as well as DEMATT will assist in the development of training and testing in support of the RTC and will offer special short and full-term courses at its frailities. This has been proposed as an action for the Department of Engineering of the Polytechnic.

C. Content Description

On the basis of the needs assessment and discussions with the MOTC, equipment suppliers, and supplemental interviews with established carriers, areas of specialization were selected for inclusion in the training program and the primary focus of responsibility was identified (See Figure F4-6: Area of Specialization for Program Development.) In nearly every case DEMATT or an umbrella organization would be assisting in related on-the-job training, but they would be drawing resources from the primary provider of training. The issues to be included under each of these topics are briefly provided as follows:

Financial Management and Control for Trucking Operations

Rationale and Objectives of Financial Management

Data Collection and Compilation

Accounting Systems

Balance Sheets
Variable and Fixed Costs
Cost Accounting

Costing, Pricing and Profit Determination

Operational Planning

Rationale and Objectives of Operational Planning
Information Collection and Presentation
Setting Targets and Priorities
Alternative Strategies
Measuring Performance
Reducing Downtime, Standing and Deadheading

International Marketing

Rationale and Objectives of Marketing
Marketing Channels
    SubContracting
    MITCO
Marketing Research
Regional Market Options
Market Selection
Documentation
Quotations
Payment Procedures

Terminal Operations

Rationale and Objectives of a Terminal System Operating Plan
Terminal Plan and Standards
Advance Planning
    Customs Clearance
    Delivery and Acceptance, Documentation
    Vehicle Servicing
    Crew Change
    Taking on a new Load
    Documentation
Warehousing
*Driver Instruction on Loading and Load Distribution
*Vehicle loading requirements
*Documentation and Forms
*Loading and Unloading Techniques

* To be included in a separate course but in abridged form for drivers and their assistants

Personnel Supervision and Training

Drivers
Mechanics
Others

Rationale and Objectives of Personnel Management
Development and Utility of Job Descriptions
Selection Process
Information collection, compilation and analysis
Training purposes and strategies
Interpersonnel Relations
Monitoring and Evaluation Techniques
Incentive programs

Long Distance Driving

Long Distance Driving Techniques
Operating Heavy, Articulated Vehicles and Drawbar Trailers
General Safety Considerations
Handling Hazardous Materials
Temporary Mechanical repairs
Break-down Procedures
General Documentation
Customs and Board Clearance Requirements and Procedures
Delivery and Receipt of Goods
Proper Loading Requirements and Techniques
Relevant Laws and Regulations: Domestic and Foreign
Dealing with Public Officials

This is suggested as two units, the first for drivers only and the second for drivers and others. Courses to be offered at the Polytechnic on behalf of the RTC and in preparation for the certification process to be required by the RTC before an International Road Service Permit would be issued. A short course would be developed to introduce candidates to the qualifications required and a longer course would provide more specialized training keyed to the actual examination and certification process. During training course probably be most effectively handled by selected driving schools under special certification by the RTC.

Preventive Maintenance, System Planning and Programing

Rationale and Objectives of Preventive Maintenance

Information Collection, Compilation and Analysis

- Driver reports
- Fuel consumption
- Servicing inspection reports
- Oil sample analysis
- Tire wear

Programing

- Facilities
- Staff
- Equipment and materials
- Spares

Integration with Operational Planning and Traffic Requirements

Alternative Strategies

Mechanical

This is largely to be affected with the assistance of the vehicle suppliers. A three week intensive course is suggested for graduates of the Polytechnic to upgrade their knowledge of heavy capacity vehicles. This training should initially be offered by the supplier but subsequently integrated into the Polytechnic program. It is recommended that all international operators take the 3 day introductory course offered by MALTRACO. Funding under the project would include the cost of a select package of booklets from the suppliers program for retention and reference of all participants.

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1 Note: The equipment suppliers binder of booklets on automotive systems is an especially useful reference for the owner operator. It would be useful if the printed materials prepared in relation to each of the training areas discussed above could be similarly grouped as an integrated guide or restructured into a guide book for profitable trucking. Similarly a glossary of relevant terms should be produced. To assist in the process of designing culturally specific trucking materials it would be useful to assemble a package of comparable materials designed for the owner-operator in the United States. This activity would be especially useful if executed before project start-up.

D. Linkage Mechanisms

1. Technical Assistance

Effective coordination of the training program and integration of the components proposed will be essential to the success of the project. Primary responsibility for program coordination will rest with the Training Coordinator, Training Coordinator/Advisor (TCA), but he is to be assisted in this activity by DEMATT in their provision of monitoring and evaluation services. (See Figure F4-7). The TCA will be responsible for refining the schedule for implementing the training program, identify needs for short term technical assistance and systematic evaluation of project import. In this capacity he will provide a monthly report to the MOTC/USAID which will detail project activities and achievements, about the MOTC/USAID of central elements or issues restricting project implementation, and provide a rolling plan of projected timing for program implementation. Specific delineations of tasks are included in the job descriptions given in Annex F4-6.

The TCA is expected to be actively involved in all the training components discussed here, thus providing both vertical and horizontal linkage. Since he will be specifically responsible to the MOTC and will be acting on their behalf in contract negotiation and invoicing, it would seem advisable that he be located in MOTC offices. The RTC in Blantyre has expressed willingness to provide office space for the TCA which would facilitate the particular focus of the TCA on the requirements of the RTC. The Training Coordination Adviser is expected to be highly mobile, considerably reducing the importance of the specific physical location of his office. Should the physical accommodations of the RTC prove too restrictive, the Polytechnic or some other location in Blantyre should be considered.

B. Training Task Force

It is proposed that even prior to project start-up, a Training Task Force be set up to determine the initial steps required to implement a Training program for the road transport industry. The linkage to be provided by this committee is primarily seen as an aid to communication and coordination rather than any directing role. The committee will be chaired by a representative of the MOTC and the Training Coordinator/Advisor will serve as the Secretary of the Task Force. The TTE should meet only on a monthly basis at which time the report of the Training Coordinator/Adviser will be reviewed and revised as necessary before presentation to the MOTC Project Director. Members of the Task Force would include representatives of all training components:

MOTC, Representative
Training Coordinator/Advisor
DEMATT
Polytechnic
Others (Suppliers; Umbrellas; etc.)
Ex Officio Mmembers as needed

C. DEMATT

DEMATT is to play a role in program linkage through a full range of actions including screening, need assessment, training, monitoring, and evaluation. Its role in the training program will be directed and coordinated by the TCA with the assistance, as needed, of short-term specialists provided under the technical assistance component of the project.

DEMATT has been selected to provide this role on the basis of several factors:

-it represents an in-country institution with established training capabilities;

-its primary objective of assisting the small businessman is highly supportive of the project rationale as well as the AID CDSS for Malawi;

-its use of one-on-one training in on-the-job settings is especially complementary to this project;

-it has an established staff of Malawian business advisers located throughout the country as well as supervisors and centrally-located staff and technical advisers;

-its training philosophy is consistent with the methodological approach set forth earlier in this section;

-it has established experience with loan monitoring for INDEBANK;

-it can facilitate an early start-up for the program as well as participate in pre-start-up preparations; and,

-participation in the program will provide DEMATT with capabilities to be retained after the life of the project assisting in the maximization of long-term project impact.

The role to be played by DEMATT is multiphased and intended to assist the Training Coordination Adviser in program implementation. More specifically these include:

-design and implementation of initial screen of transporters interested in training and in some cases assistance with financial packaging for vehicle purchase;[1]

-follow-up training including assisting the Polytechnic with demonstration units for carriers not placed under an umbrella;

-assistance for the umbrellas in the development of training for financial management, operations, preventative maintenance systems and the other non-mechanical areas of specialization identified in Sub-section C;

-coordination and assistance for Polytechnic course development including evaluation of short courses, demonstration units and full-term courses;

-assistance in overall program coordination and monitoring; and,

-membership on the steering committee.

E. Costs

The costs for the components and associated equipment included in the training program for the project represent about US$368,500.00 for the three year life of the project. A summary of these costs is given in Table F4-1. Cost Summary for Training. Explanation of this table is provided by details in tables F4-2 through F4-11, all of which are included under Attachment F4-11.

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1 Screening is expected to exceed those likely to be considered for INDEBANK financing or lease arrangements to include those interested in commercial financing for new vehicles as well as those already owning heavy vehicles, able to handle their own financing directly, or those simply interested in additional information about entrance into international truck transport.

F. Fees

The use of training fees is encouraged under this project to show some commitment by the trainee to the training. These fees may be nominal in the start-up phase, in order to maximize training in the transport sector and get the broadest exposure for the program.

Toward the end of the program, it is expected that standard DEMATT and Polytechnic training fees would be changed. The fee structure used by these organizations is essentially on a marginal cost basis and therefore will not overburden the trainees.

LIST OF ATTACHMENTS FOR

ANNEX F4

F4-1 The University of Malawi- The Polytechnic Engineering Department, Motor Vehicle Technicians.

F4-2 University of Malawi - Department of Management, Management Training

F4-3 The Development of Malawian Traders Trust Training Course Outline.

F4-4 Mack Trucks Introduction Programme Schedule for Press Transport.

F4-5 Pemba School of Driving.

F4-6 Survey Questionaire, Advanced Mailing.

F4-7 Survey Questionaire, Interview Form.

F4-8 Questionaire for Owner-Operators.

F4-9 Summary, Malawi Commercial Transport Project Survey of Trucking Firms

F4-10 University of Malawi - The Polytechnic Department of Management

F4-11 Costing Tables.

LIST OF ATTACHMENTS FOR ANNEX F4

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F4-10 University of Malawi- The Polytechnic Department of Management.

F4-11 Costing Tables.

Table F4-1

Cost Summary for Training

in US $

Description	REF	Year 1	Year 2	Year 3	Total
DEMATT Services	Table F4-2 Table F4-3	16,045	11,035	11,035	38,115
Polytechnic	Table F4-4	37,200	35,000	52,875	125,075
Umbrella Training[1]		14,400	14,400	14,000	43,200
*Audiovisual Package A	Table F4-5	11,200			11,200
*Audiovisual Package B	Table F4-6	10,800			10,800
*Tool Package for Polytechnic	Table F4-7	3,600			3,600
*Tool Package for Umbrellas		12,960			12,960
*Supplemental Equipment, Polytechnic	Table F4-8	25,320			25,320
*Office Equipment for TCA Office	Table F4-9	5,976			5,976
*Portable Demonstration Unit	Table F4-10	1,800			1,800
*Reproduction Equipment, supplies	Table F4-11	81,420			81,420
Subscriptions, Printed booklets		7,000	1,000	1,000	9,000
TOTAL					368,466

*indicates items for years 1-3 combined

1 Based on 4 days a month at US$ 100 a day for 3 umbrellas; To be supplemented by DEMATT/Polytechnic training

2 Expansion of Mechanical Workshop at Polytechnic for audiovisual purposes should be considered using revolving local currency funds

3 Same list as F4-7 plus option of tool box sets for two umbrellas

4 MALTRACO will provide 3 day training to non-Mack users if costs of sets of booklets can be provided. Costs include 150 sets at US$ 20 each plus 20 percent freight or 5,112 plus 1000 for subscriptions/other publications, say 7,000

REF Tables included under Attachment F4-11

THE UNIVERSITY OF MALAWI - THE POLYTECHNIC

REF. 16/G/5

ENGINEERING DEPARTMENT

MOTOR VEHICLE TECHNICIANS PART I FIRST YEAR

WORKSHOP PRACTICE

NO. OF WEEKS: 10

NO. OF HOURS PER WEEK: 10

FIRST TERM

WEEK

1 Layout of Vehicles - inspection of the layout of cars and commercial vehicles; noting the various drive arrangements.

2 Engines - dismantling and inspecting a 4 stroke engine and a 2 stroke engine. Note sequence of operations. Reassembling of same engines, adjusting valve clearances, crankshaft and float, valve timing, etc.

3 Electrical Equipment - Inspection of the electrical equipment and wiring of cars and commercial vehicles. Remove, dismantle and check a distributor - reassemble and set point gap. Refit to engine. Clear and adjust spark plugs.

4 Cooling System and Fuel System - Inspection of cooling system layout and components - removal and replacement of various parts. Inspection of a fuel system - noting type and run of piping.

5 Clutch - Removal and dismantling clutches from various vehicles. Noting points of wear - reassembly and adjustment.

6 Gearbox - removal and dismantling gearboxes - particularly sliding mech types. Also C.V. gearboxes. Note construction, adjustments, etc. Reassembly and replace.

7 Propeller Shafts - Replacement of universal joints - checking propeller shafts for straightness using V blocks and dial gauge.

8 Rear Axle -- Removal of complete rear axle from vehicle - dismantle final drive assembly - check for wear. Reassembly of final drive and basic adjustments.

9
10 Remove rear hubs and dismantle - note position of bearings, oil seals, retainers, etc. Reassemble and replace axle to vehicle.

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REF. 16/G/5

ENGINEERING DEPARTMENT

MOTOR VEHICLE TECHNICIANS PART I FIRST YEAR

WORKSHOP PRACTICE

SECOND TERM

NO. OF WEEKS: 10

NO. OF HOURS PER WEEK: 10

WEEK

1 Front Axle and Steering - Removal and replacement of a beam axle, noting [illegible] method of attachment, etc. Checking and adjusting steering linkage to correct wheel alignment (including checking 'toe-out on turns').

2 Remove and dismantle various types of steering gears, noting the method of adjustment, oil retention, etc. Reassemble and replace on vehicle.

3 Brakes - Inspection of braking system - remove and dismantle components (not servo's) inspect and reassemble. Dismantle drum brakes and reassemble - note provisions for adjustments.

4 Lamps and Cables - Inspecting head and other lamps on vehicles - alignment of headlamps. Inspection of cables to note cable sizes relative to current carried in circuit.

5 Batteries - Testing of batteries using H.R. discharge test, hydrometer and voltmeter. Make up electrolyte - emphasis on safety during procedure.

6 Workshop Technology - Use of fitting tools in construction of simple piece.

7 Identifying various metals by workshop methods - determination of physical properties for suitability for specific use.

8 Soldering exercises - nipples on pipes, soldered joint on stranded wire, patch on drum, etc.
Use of correct fluxes, etc.

9 Use of tape and dies - identification of threads commonly used.
Reclamation of damaged threads both external and internal.
Use of inserts.

10 Use of external and internal micrometers in measurement of vehicle components. Use of callipers both in Imperial and Metric measurments.

THE UNIVERSITY OF MALAWI - THE POLYTECHNIC

ENGINEERING DEPARTMENT

REF. 16/G/5

MOTOR VEHICLE TECHNICIANS PART I SECOND YEAR

WORKSHOP PRACTICE

FIRST TERM

NO. OF WEEKS: 10

NO. OF HOURS PER WEEK: 10

WEEK

1 **Engines** - Valve and valve seat grinding.
Checking alignment of car rods using special jip and surface plate and Vee blocks.

2 Measurement of cylinder bores using bore gauge and internal micrometer - reboring cylinders to a specified oversize.

3 Fitting of piston rings and fitting pistons to car rods - assemble into engine.

4 Timing of camshaft to crankshaft for various types of drive.

5 **C.I. Engine** - stripping a C.I. engine to note difference in constructional details to a spark ignition engine.

6 Timing of a high pressure pump to an engine.

7 Stripping, checking and assembling of in-line high pressure injection pumps. Phasing and calibrating using special test bed.

8 Inspection of governors - checking settings of governors with pump on test bed. Dismantle, examine and reassemble injectors of various types, set injectors on test rig.

9 **Carburettors** - Remove, dismantle and examine for operation a fixed choke and a variable choke carburettor.

10 Note any particular features or adjustments. Reassemble, replace and set with engine running.
Dismantle, examine, reassemble and test an electrically and a mechanically operated petrol pump.

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MOTOR VEHICLE TECHNICIANS PART I SECOND YEAR

WORKSHOP PRACTICE

SECOND TERM

NO. OF WEEKS: 10

NO. OF HOURS PER WEEK: 10

WEEK:

1 Lubrication - Dismantle and inspect an oil pump. Reassemble and test, if possible, its output. Checking pressure relief valves, oil pressure switches and gauges for correct operation.

2 Cooling System - Remove and dismantle a water impeller. Fit new impeller and bearings and reassemble. Test a cooling system for pressure retention and a pressure cap for correct operation. Test thermostat for correct operation.

3 Electrical - testing of a complete ignition system using voltmeter and ammeter.

4 Timing of a distributor to an engine both statically and dynamically. Overhaul of inertia and pre-engaged starter drives, test for correct operation.

5 Gearbox - dismantle a gearbox and examine the synchromesh device - note points of wear and method of operation. Reassemble gearbox.

6 Final Drive Dismantle a final drive and reassemble, making all necessary adjustments for correct bearing prebading and gear meshing.

7 Steering System - Checking of caster, camber and steering axis inclination using special equipment.

8 Suspension and Dampers - removal of a spring - both leaf and coil. Check for wear and replace. Note safety precautions to be observed. Checking of dampers for correct operation.

9 Brakes - Removal and dismantling of different types of master cylinders. Checking method of operation, wear etc. Dismantle and examine a disc brake assembly.

10 Wheels and Tyres - Inspection of wheels and tyres for types, wear pattern of tyre tread, etc. Remove and refit a tyre. Static and dynamic wheel balancing.

Also - Vehicle road worthiness examination and report.

UNIVERSITY OF MALAWI - THE POLYTECHNIC

ENGINEERING DEPARTMENT

MOTOR VEHICLE TECHNICIANS PART II

MOTOR VEHICLE WORKSHOP 2ND TERM - 3RD YEAR

NO. OF WEEKS 10 10 HOURS PER WEEK

WEEK

1. Use of engine ignition system analysing equipment; interpretation of results and recommended rectification.

2. Examination of various types of engine superchargers.

3. Dismantle, examine reassemble and adjust various types of spring operated friction clutch. Examination of a fluid coupling; a single stage and a multistage torque converter.

4. Dismantle, examine and reassemble a laycock overdrive unit. Examination of an epicyclic gear-box to note method of operation of gears and any adjustments.

5. Dismantle, examine and reassemble an automatic gearbox noting particularly the mechanical power flow, settings and adjustments required.

6. Examination of the control unit (valve body) of an automatic gearbox to note location of valves etc. and possible areas of malfunction.

7. Remove from vehicle, dismantle examine reassemble and replace a constant velocity joint.

8. Dismantle and examine a brake vacuum servo unit for mode of operation and possible faults.

9. Examine various brake pressure limi ng valves for mode of operation.

10. Examine various types of wheel brakes, both drum and disc. for latest designs and methods of adjustment. Methods of pad replacement.

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UNIVERSITY OF MALAWI - THE POLYTECHNIC

ENGINEERING DEPARTMENT

MOTOR VEHICLE TECHNICIANS PART II

MOTOR VEHICLE WORKSHOP 1ST TERM 3RD YEAR

NO. OF WEEKS - 10 10 HOURS PER WEEK

WEEK

1. Examining and testing the coil ignition system of a motor vehicle. Correct use of instruments. Use of stroberscope and timing light to measure the ignition timing. Examination of distributors testing of distrubutors.

2. Dismantle, examine and test a D.C. generator. Use of test instruments, including 'growler' testing of armatures.

3. Testing of generator output on the vehicle. Testing of a compensated voltage control unit and a current-voltage control unit. Interpretation of results.

4. Dismantle, examine and test an alternator. Use of instruments with particular regard to polarity.

5. Testing of an alternator and its associated control units on the vehicle. Particular instruction on the use of instruments, connections etc.

6. Examination of common types of carburettor in use to note particular features and modes of operation.

7. Examination of an engine with a petrol injection system - to note method of operation, adjustments and maintenance.

8. Dismantle, examine, reassemble and test an in-line fuel injection pump.

9. Dismantle, examine reassemble and test a distributor types of fuel injection pump.

10. Inspect and test various types of injector for wear and operation. Progress test at end of term on above tasks.

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UNIVERSITY OF MALAWI - THE POLYTECHNIC

ENGINEERING DEPARTMENT

MOTOR VEHICLE TECHNICIANS PT.II

Workshop 1st Term — 4 YEAR

No. of Weeks 10 — 10 Hours per Week

WEEK			
1	Examination of Braking Systems	-	Inspect componante of air braking syste and layout of pipework, valves etc.
2	Automatic Transmissions	-	Strip and examine various types of automatice transmission, determination power flow, examination of valve bodies etc.
3	Diesel Pumps	-	Strip and examine "in-line" and "rotary high pressure pumps. Reassemble and te
4	Crypton Engine Analyser	-	Assessment of the vehicles ignition system using the analyser.
5	Manifolds	-	Inspections of inlet and schanet manifc with regard to single and multiple carburattor arrangemnets.
6	Combustion Chambers and Valve Arrangements	-	Inspection of chambers, valves etc;, with regard to the combust process, gas flow etc.
7	Electrical Systems	-	Further work on wiring of vehicles, particularly fault finding.
8	Alternators	-	Further work on alternators - stripping and complete testing of componante. Reassembly and test.
9	Carburattors	-	Inspection of multi-choke carburattors Setting up of multi-carburattor layouts
10	Completion of above work	-	Progress test.

UNIVERSITY OF MALAWI - THE POLYTECHNIC

ENGINEERING DEPARTMENT

MOTOR VEHICLE TECHNICIANS PT.II

WORKSHOP 2ND TERM — 4TH YEAR

NO. OF WEEKS 8 — 10 HOURS PER WEEK

WEEK

1.	Steering Systems	-	Inspection of Steering Systems using power assistance. Twin Axle Steering - inspection of linkages.
2.	Power Assistant Steering	-	Strip and examine various types of power steering units. Reassembly and, where possible, test.
3.	Inspension Systems	-	Strip and examine different types of suspension systems. Air, liquid, Rubber etc.
4.	Susnension Layout for C.V.	-	Examination of the suspension and mounting layout for C.V. rear axles (twin axles).
5.	Final Drives	-	Inspect four wheel and multi-axle driving arrangements.
6.	Final Drives	-	Remove, strip and examine a limited slip and differential reassemble.
7.	Final Drives	-	Remove, strip and examine a two speed final drive and double reduction hubs.
8.	Complete of above work and preparation for final examination.		

UNIVERSITY OF MALAWI - THE POLYTECHNIC

DEPARTMENT OF MANAGEMENT

MANAGEMENT TRAINING — Information Sheet No.9

1 Past Programme of Short Courses

The courses advertised in the previous Information Sheet (No.8) have all been conducted successfully. The demand for places has been such that several nominees have had to be put on reserve or placed on the next scheduled course.

The administrative arrangements for the courses have worked well, but however, not without snags. A number of participants failed to turn up for their respective courses and their companies have requested that they be put on the future courses. While this can normally be arranged, it would be much appreciated if at least one week's notice of a nominee's non-attendance could be given. This would then give us time to arrange for a substitute to take up the now vacant place. A better alternative, would of course, be the one where a company nominated a replacement.

Our series of short courses have covered the usual area of general management, marketing and sales management and stock control. Our courses are always under constant review, by re-examining the contents of the courses. This may necessitate additional materials and/or re-arrangement of existing programmes. Following this policy and bearing in mind the feedback from participants and their immediate supervisors, it has been felt that the duration of some courses be extended by an extra day. For a start, two courses (Stock Control and General Management Development were ran for 4 days). It is our hope that this on-going policy of course reviews will continue and that courses will be adjusted as highlighted by such reviews.

For those who so wish, we have limited facilities to provide lunch at a minimum charge of K1.00 per meal payable in advance. This can easily be arranged on arrival (Monday morning) and these lunches would normally be served in our College Cafeteria during the normal lunch hour.

2 Diploma in Management

This part-time postgraduate course (first year) started in October, 1983. The course was advertised in the local press and interested companies and individuals responded. Going through the usual University process, a third intake of 15 students was selected and they are now in their second term, attending every Thursday as before.

The subjects currently offered in the first year are Financial Administration, Managerial Economics, General Management and Quantitative Methods. The year will end in June 1984, and second year will commence at the beginning of next academic year, in October; and students will study Marketing Management, Communication and Information, Personnel Management and Operations Management.

3 Future Programme of Short Courses

Our programme of short courses for the period May to July 1984 is as follows:-

a) Short Course Programme, May to July 1984

Course No.	Title	Dates
M115	Practice of Management	May 7 - 9
** M116	Export Marketing	May 21 - 23
* M117	General Management Development	June 4 - 7
** M118	Business Communication	June 18 - 20
** M119	Factory & Production Management	July 2 - 4
** M120	Computers in Business	July 16 - 18

* Please 4 days instead of 3.

** These are new courses.

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a) Course Details

Practice of Management : M115 Fee K75

A popular introductory course for supervisors, junior managers and management trainees, covering the basic principles of management (planning, organizing, motivating and controlling and communication (oral and written). (This course is not appropriate for experienced managers at middle or senior levels).

Export Marketing : M116 Fee K75

This new course is primarily intended for businessmen who are currently engaged in or planning to engage in the export trade. Junior or middle managers in large export - oriented organizations would find the course of benefit. Topics to be covered include export market selection and promotion, export documentation, as well as payments and transportation for exports.

General Management Development: M117 Fee K75

A course intended for middle managers, ideally those who have attended a Practice of Management course and have gained practical on-the-job experience. The main topics are setting objectives, reviewing progress, organizing people and making decisions. (This is not an introductory course).

Business Communication : M118 Fee K75

This new course aims at providing communication and language skills for junior to middle managers: develop their abilities and willingness to communicate; encourage in them an analytical approach to the consideration of information, problems and conditions requiring the formation of attitudes; introduce to the managers some aspects of the organization and workings of contemporary society; and assist them in the discovery and development of powers of creativity and initiative.

Factory and Production Management : M119 Fee K75

This is a new course and it is [illegible] at middle level managers who need an overview of the various aspects of [illegible]ions management - capacity planning, scheduling, [illegible] control, technology [illegible] management, time study and quality assurance. Types of [illegible]

Computers in Business : 120 Fee K75

This new course is intended for the person who is considering buying a computer or who has just purchased one. It aims to show hat computers can do, partly through extensive demonstrations or business computer uses. The topics will include an overview of hardware and software and use of BASIC, word processing, data base management and spreed sheet analysis. Participants will have an opportunity to use a computer.

c) Location

These courses will be conducted in the Management Centre at the Polytechnic.

d) Course Fees

The course fee covers the cost of tuition, course materials and coffee/tea. The course fee is not refundable if a nominee fails to turn up.

e) Nominations

A nomination Form is attached. If you wish to nominate any of your employees for these courses, please complete the form and send it to me as soon as possible, including your cheque for the appropriate amount; indicating clearly the course desired.

f) Further Information

If you would like any further information about this series of courses, about in-company courses and consultancy, or the activities of the Management Department generally, please get in touch with me. I will be pleased to discuss the services which we provide.

James E Chipeta
Head of Management Department
for : PRINCIPAL

University of Malawi - The Polytechnic
Private Bag 303
Chichiri
Blantyre 3.

Phone : 632 144

EJS/cg
March, 1984.

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ATTACHMENT F4-3

THE DEVELOPMENT OF MALAWIAN TRADERS TRUST

TRAINING COURSE OUTLINE

Week 1:

Orientation

- Current Status of Trust Programme and Expansion Plans
- Role of Business Advisor in the Trust
- Social, Economic and Cultural Background in Malawi

Week 2:

Basic Business Controls

- Cash Book and Expense Record
- Debtors and Creditors Record
- Stock Management
- Using Basic Controls

Week 3:

Management Accounts and Decisions

- First Consulting Session
- Starting Balance Sheet, Balance Sheet and Profit and Loss Statement
- Short Term Business Decisions
- Demand, Distribution, and Salesmanship

Week 4 and 5:

Field Work

- The trainee will work with an established Business Advisor for two weeks, observing him at work with clients at first and then practicing the skills while the Business Advisor watches and coaches.

- The trainee will also complete an assignment in observing the trading centre and assessing various situations such as local demand and, supply, production, transport, literacy, and other matters having a direct bearing on business strength. A written report will be submitted.

Week 6:

Review of Field Experiences

- Problem Analysis and Helping Clients Identify Business Objectives

Advising Small-Scale Producers

- Introduction to Small-Scale Production
- Consultancy for Small-Scale Producers
- Cost Accounting

Week 7:

Marketing

- Demand in the Market Place
- Distribution and Pricing
- Promotion
- Linkages between Large and Small-Scale businesses

Making Effective Presentations

- Theory and Practice in Making Public Addresses

Week 8:

Business Planning

- Banking in Malawi
- Objectives and Budgets
- Loans
- Long - term Planning

Trust Administrative Procedures

Developing Plans for your Trading Centre

ATTACHMENT F4-4

MACK TRUCKS INTRODUCTION OR [illegible] SCHEDULE

FIRST DAY:

8:30-9:00 : INTRODUCTION TO [illegible] PREMISES

9:00-10:00 : INTRODUCTION TO MACK [illegible] OF MACK".

10:00-10:15

10:15-12:00 : MACK TRUCK ENGINE OPERATION, FOUR STROKE, [illegible] CYLINDER ENGINE. COMPARISON OF MACK AIR INDUCTION SYSTEMS WITH OTHER SYSTEMS. CHARGED AIR COOLING SYSTEM OPERATION.

12:00-13:30 : LUNCH BREAK

13:30-15:00 : MACK DIESEL FUEL SYSTEMS OPERATING PRINCIPLES

15:00-15:15 : BREAK

15:15-16:00 : ENGINE COOLING SYSTEM OPERATION, EFFECTS OF NOT USING COOLING SYSTEM CONDITIONERS.

SECOND DAY:

8:00-10:00 : LUBRICATION SYSTEM OPERATION, ELECTRICAL SYSTEM STARTING AND CHARGING CIRCUITS, THEIR COMPONENTS AND OPERATION.

10:00-10:15 : BREAK

10:15-12:00 : CONTINUATION OF ELECTRICAL SYSTEM

12:00-13:30 : LUNCH BREAK

13:30-15:00 : CLUTCH SYSTEM OPERATION, MAXITORQUE TRANSMISSIONS DESIGN FEATURES, LUBRICATION SYSTEM, POWER TRANSMISSION FROM THE ENGINE THROUGH THE PINION GEAR, COUNTER SHAFTS AND OUT THE MAINSHAFT.

15:00-15:15 BREAK

Best Available Document

15:15-16:00 TRANSFER GEAR CASE OPERATION AND LUBRICATION. DRIVE LINE ANALYSIS POWER FLOW AND OPERATING ANGLES.

THIRD DAY:

8:00-10:00 : MACK DUAL REDUCTION CARRIERS OPERATING PRINCIPLES INTER-AXLE POWER DIVIDER AND LUBRICATING SYSTEMS.

10:00-10:15 : BREAK

10:15-12:00 : AIR BREAKS, FOUNDATION BRAKES AND ENGINE DYNATARD BRAKE SYSTEMS OPERATION, CONSTRUCTION.

12:00-13:30 : LUNCH BREAK

THIRD DAY CONT....

13:30-15:00	ROSS HFD POWER STEERING SYSTEMS CONSTRUCTION, PRINCIPLES OF OPERATION.
15:00-15:15	: BREAK
15:15-16:00	: FRONT END AND FRAME ALIGNMENT OPERATING ANGLES
16:00-17:00	: POST TEST

Best Available Document

[illegible]

OBJECTIVES:

AFTER THE INTRODUCTION TO MACK TRUCK, THE PARTICIPANTS SHOULD

1. IDENTIFY THE COMPONENTS OF ALL THE MACK TRUCK SYSTEMS
2. DESCRIBE THE OPERATION OF EACH COMPONENT
3. TRACE THE FLOW OF:-
   A. LUBRICATION SYSTEM
   B. AIR SYSTEM(BRAKES ETC)
   C. FUEL SYSTEM
   D. COOLING SYSTEM
4. UNDERSTAND GENERAL TRUCK ORIENTATION

COURSE CONTENT:

UNDERSTAND THE TYPES OF ENGINES, TRANSMISSIONS, STEERING GEARS, DUAL REDUCTION CARRIERS, TRANSFER CASES WHICH ARE USED ON MACK TRUCKS.

Best Available Document

[illegible]

COURSE DURATION

TOOLS REQUIRED

: [illegible] SCALE, [illegible] DIAL INDICATOR

COURSE OBJECTIVES

: AFTER THE COURSE [illegible] WOULD BE ABLE TO DO THE FOLLOWING:-

A. IDENTIFY COMPONENTS OF THE AIR INDUCTION SYSTEM

B. EXPLAIN THE SYSTEM OPERATION

C. MAINTAIN THE PREVENTIVE MAINTENANCE CHECKS OF THE SYSTEM

D. DIAGNOSE FAULTS ON THE SYSTEM USING THE REQUIRED TOOLING

COURSE CONTENT

AIR INDUCTION

: MAINTENANCE, OPERATION AND TROUBLESHOOTING

TURBOCHARGERS

OPERATION, MAINTENANCE, FAILURE ANALYSIS AND TROUBLESHOOTING

CHARGE AIR COOLING SYSTEM

OPERATION, MAINTENANCE AND TROUBLESHOOTING

Best Available Document

COURSE TITLE : [illegible] DIESEL [illegible]

COURSE DURATION : [illegible] DAYS

TOOLS REQUIRED :

[illegible] EXTENSI[illegible]
'K' DIMENSION GAUGE (AMERICAN [illegible])
0-60 PSI GAUGE
0-1" OUTSIDE MICROMETER
HIGH PRESSURE PUMP [illegible]
NOZZLE TESTER
AIR REGULATOR

COURSE OBJECTIVES : AFTER THE COURSE THE PARTICIPANTS SHOULD BE ABLE TO:

A. IDENTIFY THE COMPONENTS OF THE FUEL SYSTEM

B. DESCRIBE THE OPERATION OF EACH COMPONENT

C. TRACE THE FUEL FLOW FROM THE TANK TO THE INJECTOR NOZZLES

D. CARRY OUT THE PERIODIC PREVENTIVE MAINTENANCE

E. TROUBLESHOOT AND ADJUST FUEL SYSTEM COMPONENTS USING THE RIGHT TOOLS

COURSE CONTENT
FUEL SYSTEMS : KNOW THE OPERATING PRINCIPLES AND PERIODIC MAINTENANCE

FUEL SYSTEM UP-DATE : KNOW THE FUEL SYSTEM IMPROVEMENTS AND THEIR ADJUSTMENT

DIAGNOSING FUEL SYSTEM PROBLEMS

Best Available Document

COURSE TITLE

COURSE DURATION

TOOLS REQUIRED

BELT TENSION GAUGE

COOLING SYSTEM PRESSURE TESTER

TEMPERATURE GAUGE

OBJECTIVES :

AFTER THE COURSE THE PARTICIPANTS SHOULD BE ABLE TO DO THE FOLLOWING:-

A. IDENTIFY COMPONENTS OF THE COOLING SYSTEMS

B. EXPLAIN THE SYSTEM OPERATION

C. TRACE THE WATER FLOW THROUGH THE SYSTEM WHEN THE ENGINE IS COLD AND AT NORMAL OPERATING TEMPERATURES.

D. DIAGNOSE FAULTS IN THE SYSTEM USING REQUIRED TOOLING.

COURSE CONTENT

OPERATION OF THE SYSTEM(VISCOUS FAN DRIVE)

MAINTENANCE PROCEDURES OF THE SYSTEM

TROUBLESHOOTING PROCEDURES OF THE SYSTEM

OPERATION OF THERMOSTAT

OPERATION OF THE WATER PUMP

OPERATION OF THE RADIATOR PRESSURE CAP

DISCUSS SHUTTER SYSTEM

Best Available Document

COURSE TITLE : ELECTRICAL SYSTEM

COURSE DURATION : THREE (3) DAYS

TOOLS REQUIRED : HYDROMETER

AMMETER)
VOLMETER) MULTIMETER
OHMETER)

OBJECTIVES : AFTER THE COURSE THE PARTICIPANTS SHOULD BE ABLE TO:-

A. IDENTIFY THE COMPONENTS OF THE ELECTRICAL SYSTEM

B. EXPLAIN THE SYSTEM OPERATION

C. TRACE CURRENT FLOW THROUGH THE STARTING, CHARGING AND ACCESSORY CIRCUITS

D. TEST ALL THE ELCTRICAL COMPONENTS USING THE RIGHT TO

E. DIAGNOSE FAULTS OF THE SYSTEM USING THE REQUIRED TOO

COURSE CONTENT : KNOW THE OPERATION OF THE STARTING, CHARGING AND ACCESSORY CIRCUITS.

MAINTENANCE OF THE SYSTEM COMPONENTS

TROUBLESHOOTING THE CIRCUITS AND COMPONENTS(ALTERNATO STATOR MOTORS, RELAYS ETC).

Best Available Document

TOOLS REQUIRED	[illegible] DATA [illegible]
	HIGH PRESSURE [illegible]
	NOZZLE TESTER
	BOOST PRESSURE GAUGE
	MASTER TACHOMETER
	FUEL PRESSURE GAUGE
	EXHAUST TEMPERATURE GAUGE (PYROMETER)
	MANOMETER
OBJECTIVES	AFTER THE COURSE THE PARTICIPANTS SHOULD BE ABLE T[illegible]
	IDENTIFY THE PROBLEM
	DIAGNOSE THE LOW POWER COMPLAINTS USING THE REQUIRE[illegible] TOOLS
	CARRY OUT NECESSARY ADJUSTMENTS USING ENGINE ADJUST[illegible] TOOLS
COURSE CONTENT	DEFINE THE TYPE OF PROBLEM
	FOLLOW THE RIGHT TEST PROCEDURES WHEN DIAGNOSING LOW POWER COMPLAINTS
	ADJUST THE ENGINE CORRECTLY.

Best Available Document

X 19D

COURSE TITLE	: MAXITORQUE TRANSMISSION, DUAL REDUCTION CARRIERS & CLUTCH
COURSE DURATION	: FIVE(5) DAYS
TOOLS NEEDED	: OUTSIDE MICROMETERS CLUTCH ADJUSTING [illegible]
OBJECTIVES	: AFTER THE COURSE THE PARTICIPANTS SHOULD BE ABLE TO: IDENTIFY THE COMPONENTS OF THE TRANSMISSIONS, DUAL REDUCTION CARRIERS AND CLUTCH EXPLAIN THE LUBRICATION SYSTEMS OF THE TRANSMISSION AND DUAL REDUCTION CARRIERS FOLLOW THE POWER FLOW THROUGH THE CLUTCH, TRANSMISSION AND DUAL REDUCTION CARRIERS. CARRY OUT THE PERIODIC PREVENTIVE MAINTENANCE TROUBLESHOOT THE FAULTS USING THE NECESSARY TOOLS
COURSE CONTENT	KNOW THE DESIGN FEATURES OF: MAXITORQUE TRANSMISSIONS DUAL REDUCTION CARRIERS CLUTCH SYSTEM DISASSEMBLY & ASSEMBLY PROCEDURES OF THE ABOVE UNITS FAILURE ANALYSIS

Best Available Document

COURSE TITLE

COURSE DURATION

TOOLS REQUIRED

PROTRACTOR

OBJECTIVES

AFTER THE COURSE, THE [illegible] ABLE TO

IDENTIFY COMPONENTS OF THE DRIVE LINE

USE THE PROPER LUBE [illegible], LUBRICANT, LUBE CYCLE

CHECK AND ADJUST THE ALIGNMENT OPERATING ANGLES

DIAGNOSIZE THE DRIVE LINE ANALYSIS FAULTS

COURSE CONTENT

KNOW THE DESIGN FEATURES

UNDERSTAND THE POWER FLOW THROUGH THE DRIVE LINE AND ITS OPERATING ANGLES

FAILURE ANALYSIS

Best Available Document

COURSE TITLE : AIR, FOUNDATION AND DYNATARD BRAKES

COURSE DURATION : FIVE(5) DAYS(THREE REGULAR,

TOOLS NEEDED : FEELER GAUGE
SPECIAL EXHAUST VALVE ADJUSTMENT TOOL
0-60 PSI GAUGE
0-200 PSI GAUGE

COURSE OBJECTIVES : AFTER THE COURSE PARTICIPANTS SHOULD BE ABLE TO:-

IDENTIFY COMPONENTS OF AIR BRAKES, FOUNDATION AND DYNATARD ENGINE BRAKE

TRACE AIR FLOW THROUGH THE SUPPLY ACTUATING AND AUXILIARY SYSTEMS OF AIR BRAKES

DESCRIBE OPERATION OF THE FOUNDATION BRAKES AND ITS MAINTENANCE

DESCRIBE OPERATION OF MECHANICAL AND ELECTRICAL CONTROLS OF DYNATARD ENGINE BRAKE.

CARRY OUT SPECIAL EXHAUST VALVE AND INJECTION PUMP SWITCH ADJUSTMENTS.

RELINE AND RECONDITION MACK FOUNDATION BRAKES.

CARRY OUT PREVENTIVE MAINTENANCE OF THE ABOVE SYSTEMS

TROUBLESHOOT THE FAULTS OF THE ABOVE THREE BRAKING SYSTEMS USING THE REQUIRED TOOLING.

COURSE CONTENT : KNOW THE DESIGN FEATURES OF:-

AIR BRAKES
FOUNDATION BRAKES
DYNATARD ENGINE BRAKES

. UNDERSTAND THE OPERATION OF THE ABOVE SYSTEMS.

: KNOW THE ADJUSTMENT PROCEDURES OF EXHAUST VALVES AND INJECTION PUMP SWITCH

Best Available Document

COURSE TITLE

: [illegible] SYSTEMS (TRUCK [illegible])

COURSE [illegible]

: [illegible]

TOOLS REQUIRED

: STEERING GEAR TENSIONER
POWER STEERING ANALYSER
(0 TO 10 GPM)
THERMOMETER

COURSE OBJECTIVES

: AFTER THE COURSE, THE [illegible]

IDENTIFY THE COMPONENTS OF THE [illegible] POWER STEERING SYSTEMS AND [illegible] STEERING GEARS

TRACE THE OIL FLOW THROUGH THE THREE DIFFERENT TYPES OF STEERING SYSTEMS

DESCRIBE THE OPERATION OF THE [illegible]

TROUBLESHOT THE STEERING SYSTEM PROBLEMS USING THE REQUIRED TOOLS

DISASSEMBLE AND ASSEMBLE THE STEERING GEARS USING THE SERVICE MANUAL PROCEDURES.

COURSE CONTENT

KNOW THE PRINCIPLE OF OPERATION OF THE MAGNA STEER [illegible] SYSTEMS

UNDERSTAND THE PREVENTIVE MAINTENANCE OF THESE SYSTEMS

KNOW THE DISASSEMBLY AND ASSEMBLY PROCEDURES.

Best Available Document

TELEPHONE: 633706

P.O. BOX 304,
BLANTYRE.

" : 721014

P.O. BOX 722,
LILONGWE.

Ladies and Gentlemen,

We have pleasure in advising you that our driving school, as commercial concern, is open to the public at any time or day of the week during working hours.

CONDITIONS:

(a) All full course are for 40 days at half an hour per day.
(b) Half course are for 20 days at half an hour per day.
(c) Learners should obtain a provisional driving licence before he or she attempts to drive any of our motor vehicles.
(d) Learners who smell alcohol even if not drunk shall be refused lessons or test.
(e) Fees must be paid cash in advance and cannot be withdrawn or refunded for any reason. It is for this reason that we ask the public to think very carefully before making any payment no matter how small it may be.

FEES:

		K t
1.	Heavy goods vehicles	225.00
2.	Half course heavy goods	180.00
3.	Hire heavy goods vehicles	50.00
4.	Half hourly lesson heavy goods vehicles	10.00
5.	Cars and light goods vehicles	180.00
6.	Half course light goods vehicles	135.00
7.	Hire light goods vehicles	35.00
8.	Half hourly lessons light goods vehicles	6.00
9.	Boarding fee for full course	10.00

TEST REQUIREMENTS:

1. Provisional Driving Licences.
2. Two passport size photographs.
3. Test fees must be paid in advance at the Treasury Cashier's Office or at the Road Traffic Commissioner's Office.
4. In the case of heavy goods vehicles applicant must produce a medical certificate before purchasing a provisional driving licence and should also produce it to the driving examiner before test.
5. Any pupil who fails to comply with test requirements shall lose one of his or her test chances.
6. Although we give two trials it is most important to know that we reserve the right to refuse further test if the examiner's report is too bad on the pupil's general handling of the vehicle. Pupils if interested shall be asked to do a further few half hourly lessons at an extra K6.00 per lesson and K10.00 heavy goods.

TIME:

(a) Time is important. Learners can be refused or asked to wait for a month before the next test should they arrive late for their test. This also makes them lose one of their trials.
(b) Instructions are conducted by experienced instructors under Mr. Pemba's supervision. Mr. Pemba will do everything possible to help you.

WISHING YOU EVERY SUCCESS IN YOUR HAPPY DRIVING.

Yours faithfully,
PEMBA SCHOOL OF DRIVING

X 19

Attachment F4-6

SURVEY QUESTIONNAIRE

NAME AND ADDRESS OF FIRM: _____

_____

_____

NAME OF PERSON COMPLETING FORM: _____

POSITION: _____

DATE: _____

A. Draw a sketch of the firm's organisation chart and give the number of staff employed by the firm by organisational unit:

As a transporter, your profits are dependent on your ability to move goods as efficiently as possible. What part of your operation could benefit from further training?

Function	Benefit from Additional Training (Yes/No)
General Management of the firm	
Mid-level management/supervision	
Operations and logistical planning - (timing prompt deliveries, organising back hauls)	
Financial Management	
Billing/Collection	
Costing and pricing of services rendered	
Financial record keeping	
Personnel Management	
Driving techniques	
Vehicle Operations/Upkeep	
Vehicle Maintenance/repair (basic operation)	
Vehicle Maintenance/repair (on-the-road)	
Cargo handling (loading-off-loading)	
Warehousing/terminal operations	
Border clearance and transit	
Customs clearance	
Others (Please specify)	

In order to improve your operational efficiency what category or type of employee would benefit from job related training?

Answer with the numbers 1, 2 or 3 or N/A according to the following scale:

Could benefit from Training

Few	Some	Most	Not Applicable
1	2	3	N/A

___ General Manager
___ Superevisors
___ Operations planner
___ Financial manager
___ Vehicle fleet manager
___ Garage supervisors
___ Vehicle operators
___ Mechanics/vehicle maint
___ Warehouse manager
___ Cargo handling supervisor
___ Accounting clerks
___ Secretaries
___ Cargo handlers
___ Warehouse/depot clerks
___ Others (Please specify)
___
___

Best Available Docume

X

(97)

As stated earlier, the Polytechnic, DEMATT and the U.S. Agency for International Development (USAID) are exploring the manpower training needs which may be required to develop an international road haulage industry in Malawi and improve the domestic transport industry. However, any training program which is developed must be responsive to the industries needs and attitudes. Please review the following statements and indicate with an "X" next to the statement which represents most closely your interest in such training.

_____ I believe I can hire adequately trained individuals at a reasonable cost and therefore I am reluctant to increase this firm's operating costs by providing staff training.

_____ I believe that this firm can conduct the staff training which is required by rising individuals already on the payroll.

_____ I believe that this firm's training needs are specialized and can best be addressed by acquiring training from specialized institutions or institutions (i.e., management consulting firms, accounting firms, driving schools or other specialized institutions).

_____ I believe that this firm would be willing to procure training for a substantial number (25-50%) of its exmployees of (1) the training is practical, (2) provided at a reasonable costs and (3) organized is such a manner that it does not cause disruptions because of employee absences.

_____ None of the above: instead I believe that

_____

_____

INTERNATIONAL TRANSPORT

(Answer either part A or part B)

A. Is this firm involved in international transport? (yes/no)_____

1. If so where? Lusaka Harare Both Elsewhere (specify)

2. Are you considering any expansion of your international transport operation? (yes/no)_____

a. If so what type of expansion is being considered?

b. Will the planned expansion require hiring additional personnel? (yes/no)_____

- If so what types of people and approximately how many?

Number	Types

B. If your firm is presently not involved in international transport are you consicering such a possibility? (yes/no)_____

1. What route of international transport are you considering? Lusaka Harare Both Elsewhere (specify)

2. Would entering the international transport business require hiring additional staff? (yes/no)_____

3. What types and about how many?

Number	Types

X 199

Does your firm provide training for its staff _____

Is the training in-house_____, outside_____ or both_____

If yes to the above, what types of training are provided:

Subject Matter	Training Method	Estimated Cost	Effectiveness

Do you have any recommendations for establishing successful training programs

_____

_____

_____

What types of training programs would you consider the least valuable _____

_____

_____

Does your firm offer employees incentives for superior work performance_____

If so, what types of incentives especially for:

Safe driving _____

Good conduct _____

Sound financial management _____

Other _____

COMMENTS:

200

B. Management and Supervisory Personnel

1. Position title _____ Level of Education _____

Main responsibilities _____

_____

_____

On the job experience _____

_____

_____

a) Length of service in the present position _____

b) Has there been any change of staff in this position in the past five years

_____

c) Would training be necessary for this position _____

State form of training (i.e. classroom, on-the-job or both)

Subject Matter	Training Method
	/
	/
	/

If the training was to be held outside your premises, how much time could be spared _____ At what cost _____

COMMENTS:

Employment type	Number Employed	Education Level	Experience Level	Other Requirements	Change of staff over last 5yrs.	Are there qualified staff for this post	Would training improve job performance
Drivers							
Mechanics							
Accountants							
Warehouse Oper.							

If yes to the last question, state form of training.(i.e. classroom, on-the-job or both)

Subject Matter	Training Method	Subject Matter	Training Method
	/		/
	/		/
	/		/
	/		/
	/		/

If the training was to be held outside your premises, how much time could be spared _____ At what cost _____

Non-Technical Personnel

Employment type	Number of Permanent Employees	Number of Temporary Employees	Any Requirements	Are there advancement oppertunities for this position	Change of staff over last 5yrs.	Are there qualified staff for this post	Would training improve job performance
Secretaries							
Clerks							
Book-keepers							
Garage workers							
Load & off-load							
Warehouse work.							

If yes to the la..t questio, state form of training (i.e. classroom, on-the-job or both)

Subject Matter	Training Method	Subject Matter	Training Method

If the training was to be held outside your premises, how much time could be spared_____At what cost _

QUESTIONNAIRE FOR OWNER-OPERATORS

1. How many trucks do you operate in your fleet?
2. What is their size(capacity), age, and expected life?
3. How many kms does each vehicle run per year?
4. What is your vehicle availability? (as opposed to downtown for repairs as a percentage or days per month)
5. What is the usual waiting time for loading and offloading?
6. Do you keep monthly or weekly records of earnings, expenses and profits?
7. Do you maintain cost accounting by route or per vehicle?
8. How do you establish your rates?
9. Do you actively participate yourself in day-to-day operations?
   A. As a driver?
   B. In other ways?
10. Do you hold any other positions or jobs?
11. How many people do you employ and what is their function?
12. How do you handle :
    A. Routine service and maintainance ?
    B. Major overhauls?
13. What is the major constraint on expanding your business?
14. Have you in the past or do you now transport goods internationally?
    A. If so, how frequently
    B. What routes, commodities
    C. For how many years?
15. If you have not or are not transporting goods internationally would you be interested in doing such?
16. What would you need that you do not have now in order to profitably engage in international transporting?
17. What training or educational level do you (and your staff) have
18. Would additional training be useful to present operations or facilitate your entrance into international transporting?
19. Would you expect that such training would increase your profits ?

20. What costs would be acceptable for such training?

21. Would additional training be necessary for you to handle cargo on international routes, and if so what kind of training?

22. What areas of training would benefit you most:
    A. General Management
    B. Supervision
    C. Operations and logistics planning(timing deliveries and arranging backhauls etc.)
    D. Financial Management
    E. Billing/collections
    F. Costing and establishing rates
    G. Financial record keeping
    H. Personnel Management
    I. Driving Techniques
    J. Vehicle maintenance, servicing
    K Vehicle maintenance, in-sjop reairs
    L. Vehicle maintenance, on-the-road repairs
    M. Cargo handling
    N. Warehouse/Terminal operations
    O. Border clearance and transit
    P. Customs clearance
    Q. Other

23. Would you be interested in a loan to finance the purchase of a vehicle (30 tonne capacity) for international transporting?

SUMMARY

Malawi Commercial Transportation Project

Survey of Trucking Firms

1. Date of survey : 16 - 18 May, 1984
2. Survey sample : See attachment - A
3. Age of firms surveyed : 5 - 30 years
4. Do you consider your firm a profitable venture:
   Yes (9 firms responding)
5. Is your firm involved in:
   A. International haulage 8
   B. Domestic haulage 9
6. If international haulage, what countries?
   - Burundi
   - Mozambique (not currently)
   - South Africa
   - Tanzania
   - Zambia
   - Zimbabwe
7. If international haulage, what commodities:
   - Beans
   - Maize
   - Sugar
   - Tea
   - Tobacco
8. Average kilometers per year per vehicle:
   - 46,760 kilometers (5 firms responding)
9. How are your haulage rates established:
   - Mutual agreement with user
   - Government of Malawi set rates
     (9 firms responding)
10. Does your firm use the services of MITCO : 5
    " " " " " " " ABA : 5
    " " " " " " " Transit Agency Ltd (TAL) : 1
11. What is your firm's average standing time:
    - International - 1 - 2 Days (6 responses)
    - Domestic - 1 Day - 1 Month (6 responses
12. What is your firm's off-loading standing time:
    - International - 2 - 3 hours (6 responses)
    - Domestic - 2 - hours (6 responses)

13. What are your firm's availability rates : 80% (9 firms responding

14. What is your firm's maintenance schedule:
   - As needed 9
   - Preventative maintenance 6

15. What are your firm's plans for future expansion:
   - International 9
   - Domestic 8

16. Does your firm have a training programme for its employees : 1 (Drivers only)

17. If not, would your firm like to have a training programme for its employees : 7

18. Does your firm have an incentive programme for its employees : 9

19. If yes, what type:
   - Driver bonuses (per trip)
   - Annual bonuses for management personnel

20. Does your firm keep profit and expense records : 8

21. Does your firm have a cost accounting system by route or vehicle :
   - Route 5
   - Vehicle 5

22. What problems does your firm experience which hinder greater profitability :
   - Rates
   - Working capital
   - Availability of trucking jobs
   - International trucking regulations
   - Long delays in payment for jobs done
   - Sub-contracting
   - Loan acquisition
   - Dead heading on international routes
   - Obtaining permits for international routes
   - Localization of road haulage industry

23. If loans were available through INDEFUND would your firm be willing to purchase 30 tons trucks to increase its trucking capability :
   - Yes 6
   - No 0
   - May be 3 (Depending upon business conditions and interest rate offered)

24. Comments : (The following are responses received from those firms surveyed).

- "More active participation by MITCO in obtaining international permits."
- "Do not like sub-contracting, would be of great help if assistance could be obtained in getting direct contracting jobs."
- "A more active road safetly programme is needed."
- "Foreign operators should be limited to designated points for on and off loading."
- "Enforcement of standardized rates needed."
- "Sophisticated equipment needed for off and on loading of cargo.

* The above survey was conducted by personnel of the Malawi Polytechnic, University of Malawi and the Development of Malawian Traders Trust (DEMATT).

Survey Sample. (10 firms)

Firm	Scope of Service	Number of Vehicles(Units)	Nationality of Ownership	Date of Interview
Press Transport Limited P.O. Box 51141 Limbe PH: 650044	Domestic International	40	Malawian	2:00 P.M. 17 May, 1
F.A. Lambat P.O. Box 1123 Blantyre PH: 652405	Domestic International	36	Asian	2:00 P.M. 16 May, 19
Viola Motorways Transport P.O. Box 1152 Blantyre PH: 633579	Domestic International	5	Malawian	9:00 A.M. 17 May, 19
Inter-Carriers P.O. Box 51271 Limbe PH: 635273	International	8	Malawian (Coloured)	2:00 P.M. 18 May, 19
lan Transport (Malawi) Ltd P.O. Box 364 Blantyre PH: 632837	Domestic International	7	Zimbabwian	9:00 A.M. 16 May, 19
J. Tennett & Sons Limited P.O. Box 30201 Blantyre PH: 632180	Domestic International	8	English	8:00 A.M. 16 May, 19
Fargo Ltd P.O. Box 5122 Limbe PH: 651457/ 652968/ 651096	Domestic	17	Asian	9:00 A.M. 19 May, 19
Mkwezalamba Transport P.O. Box 711 Blantyre PH: 632485	Domestic International	4	Malawian	2:00 P.M. 17 May, 19

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Firm	Scope Service	Number of Vehicles(Units)	Nationality of Ownership	Date of Interview
A.K. Mahomed & Sons P.O. Box 209 Blantyre PH: 634351/ 634439	Domestic	25 (Estimated)	Asian	Declined to interviewed
Amosi Transport and Maize Mills P.O. Box 475 Blantyre PH: 652397	Domestic International	16	Malawian	9:00 A.M. 17 May, 198
	Total Number of Trucks	166		

UNIVERSITY OF MALAWI - THE POLYTECHNIC

DEPARTMENT OF MANAGEMENT

Course M116: Export Marketing/Procedures - 3 Day Course

Monday 21/5/84	What is marketing?	8 - 9.30 a.m.	J E Chipeta
	Marketing channels	10 - 12.00 noon	Prof. B Hazeltine
	Marketing research (including visit to MEPC TIS)	1.30 - 4.30 p.m.	Mr A R McCullough & Mr R D Salama (MEPC)
Tuesday 22/5/84	Market selection	8 - 9 a.m.	Mr McCullough
	Export documentation	10 - 12.00	Mr J D Gilmore (Manica)
	Transport - Air, road and se feeight.	1.30 - 4.30 p.m.	Mr B Currie (AMI Rennie Press)
	Freight decision exercise		
Wednesday 23/5/84	Terms of delivery	8 - 9.30	Mr S Kwelepeta (MEPC)
	Quoting a price	10.- 12.00 noon	Prof. B Hazeltine
	Payment for exports	1.30 - 3.30 p.m.	Mr B Namakhusa (NBM)
	Course Appraisal	4 - 4.30 p.m.	Mr J Chipeta & Prof. B Hazeltine

JEC/cg
April 1984

ATTACHMENT F4-11

COSTING TABLES

F4-2
F4-3
F4-4
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F4-10
F4-11

Table F4-2

COSTING ESTIMATES FOR SERVICES TO BE PROVIDED BY DEMATT

Service	Year 1	Year 2	Year 3	Totals
	----------in US Dollars--------			
1. Screening/needs assessment	4,950	2,475	2,475	9,900
2. Financial package	3,300	1,650	1,650	6,600
3. Follow-up	825	495	495	1,815
4. Monitoring - Individual Firms	1,485	2,970	2,970	7,425
5. Monitoring - Umbrellas	1,390	1,195	1,195	3,385
6. Concentrated Training Units	1,980	1,980	1,980	5,940
7. Course Evaluation - Short	795	135	135	1,065
8. Course Evaluation - Long	1,320	135	135	1,590
TOTAL	16,045	11,035	11,035	38,115

NOTES: The cost estimates indicated above are based on an hourly charge K11 based on average of costs for staff as provided by DEMATT. These costs represent a maximum for budgetting purposes and are subject to revision. Monitoring and Training may be simultaneous actions making the above categories academic distructions.

1-3 Assumes up to 100 screening of 6 hours, plus preparation of up to 50 financial packages of 8 hours, plus up to 25 follow ups of 4 hours for year 1; up to 50 screenings of 6 hours, plus up to 25 financial packages, plus up to 15 follow ups for both year 2 and year 3.

4. Assumes monitoring of up to 5 firms first year for 3 hours each month; up to 10 firms second year; 5 firms third year. Monitoring keyed to CTU's under # 6 or other requirements.

5. Assumes monitoring of 3 umbrellas 8 hours start up 4 hours each month.

6. Assumes 20 units of 12 hours each.

7. Assumes 12 hours for up to 8 courses in first year 4 hours for 4 courses in year 2 and year 3.

8. Assumes 20 hours for up to 8 courses in first year , 4 hours for 4 courses in year 2 and year 3.

Figures rounded up to whole numbers.

Table F4-3

DEVELOPMENT OF MALAWIAN TRADERS TRUST

Overhead and Hourly Rate Charges

	Business Advisor	Area Supervisor	Regional Manager	General Manager
Salary	K 200.00	K 300.00	K 564.00	K 827.00
Benefits				
Housing	150.00	300.00	750.00	850.00
Savings	10.00	15.00	28.00	41.00
Medical	13.00	16.00	16.00	16.00
Total	373.00	631.00	1358.00	1734.00
Overhead*	351.74	595.03	1280.59	1635.16
	724.74	1226.03	2638.59	3369.16
Cost per hour **	3.88	6.56	14.11	18.02

*Overhead Calculation

Month	Field	Headquarters	
April	7,491	7,106	
May	6,771	4,506	
June	6,905	6,746	
July	8,304	9,760	
August	6,115	5,432	
	35,586	33,550	94.3%

**Calculated at 187 hours per month

Table F4-4

COST FOR

CLASSROOM INSTRUCTION AND DEMONSTRATION UNITS

POLYTECHNIC

	Short Seminars[1]		Demonstrations[2]		Full Term[3]		TOTAL All Years
	No.	Cost	No.	Cost	No.	Cost	Cost
FINANCIAL MANAGEMENT	45	2,700	35	3,500	35	7,875	14,075
OPERATIONAL PLANNING	45	2.700	35	3,500	30	6,750	12,950
INTERNATIONAL MARKETING	45	2,700	35	3,500	30	6,750	12,950
TERMINAL OPERATIONS	15	900	15	1,500	15	3,375	5,775
LOADING TECHNIQUES[4]	165	9,900	--	--	--	--	9,900
PERSONNEL SUPERVISION AND TRAINING	30	1,800	30	3,000	15	3,375	8,175
LONG DISTANCE DRIVING	150	9,000	50	5,000	75	16,875	30,875
PREVENTATIVE MAINTENANCE SYSTEMS	75	4,500	35	3,500	35	7,875	15,875
MECHANICAL[5]	50	3,000	10	1,000	-	--	4,000
TRANSPORTATION BUDGET[6]	--	--		10,500[6]	-	--	10,500
TOTAL		37,200		35,000		52,875	125,075

1 Assumes cost of K 75 or about US$ 60 for each
2 Assumes cost of US$100 for each
3 Assumes cost of K 300 or about US $ 225 for each
4 Includes demonstration unit
5 To be provided primarily by suppliers
6 Assumes avergae cost of about K60 for 225 demonstrations to cover air fare and petrol.

Table F4-5

Audio Visual Package A

Item No.	Description	Quantity	Cost
1 *	Audior-Visual Slide/Cassette Projector with built in monitoring screen (B: 11 and Howell suggested) and distance projection capability	1	900
2	Wall Screen	2	300
3	Tripod Screen	1	150
4 *	Slide/Cassette Programs	6	1,200
5	Overhead Projector	3	1,200
6	Overhead Projector Portable	1	700
7	Transparency Sheets, Pens and Pencils, Kit	6	480
8			
9	Spare Bulbs	15	375
10	Easil Pad/Holder/Blackboard	6	720
11	Spare Pads	16	350
12	Overlays	24	220
13	72" Metal Storage Cabinets (180)	3	540
14	Miscellaneous		865
			8,000
	Shipping 20% plus air freight allowance of US 1,600		3,200
	Total		11,200

* For motor/mechanical instruction Department of Engineering.

Table F4-6

Audi-Visual Package B for Umbrellas

Costs for Package B represent only a partial purchase of Package A and remain open for determination on the respective needs of the individual umbrella.

3 Packages at US$ 3,000 each	9,000
20 percent for shipping	1,800
	10,800

+
210

Table F4-7

SPECIALIZED TOOLS NEEDED FOR TRAINING

1.	J29599-4	Hub Nut Socket
2.	70-7003	Cylinder Compression Tester
3.	J21905-02	Rack Setting Gauge
4.	J21392	Timing Advance Adjusting Wrench
5.	J22809	Cam Plate Gauge Block
6.	J22942	Cam Noze Angle Checking Gauge
7.	J21744-01	Rack Travel Gauge
8.	J21592	Gear Remover (Pump and Camshaft)
9.	J23363	Synchro Vance Puller
10.	J23964	Reamer Set (Used with J24600)
11.	J24345-2	Timing Plug Gauge (Robert Bosch)
12.	J24345-1	" " (American Bosch)
13.	J24659	Dynatard Gauge Plug (American)
14.	J24660	" " " (Robert)
15.	J25073	Nozzle Service Set
16.	S572	Injection Nozzle Puller (Shel's Supply & Equip & Co. 496-506 Orange Avenue, West Haven Connectitut 06515
17.	TSE76203	Thread Protector
18.	TSE79100	'K' Dimension Tool
19.	J26450	(Quantity 3) Clutch Spring Retention
20.	J26451	" " " " "
21.	J26445	Clutch Gauge
22.	J26448	" "
23.	J26460	" "
24	J8129	Scale Spring Tension
25.		Digital Multimeter
26.		AC-DC Clamp-on Ammeter
27.		Battery Load Tester

Estimated Total cost is US$ 3,000.00

Freight at 20% 600.00

3,600.00

Table F4-8

Supplemental Equipment Requirements to Upgrade The Motor Vehicle Workshop The Polytechnic, Engineering Department

In US$

Heavy Duty Jacks(2) 10 ton	4,050.00
Overhead or portable Crane(2)	6,600.00
Heavy Duty Vices (5)	750.00
Cut-away Models	2,800.00
Brake Testing Equipment	2,250.00
Mix of Tools U.S. and Metric	2,250.00
Heavy Duty Socket Sets	
Regular Socket Sets	
Ring Sets	
Combination Sets	
Flat Screw Drivers	
Phillips Screw Drivers	
Mole Wrenches	
Plug Spanners	
Pliers with Plastic Covers	
Standard Tool Box Sets for Demonstrations (4)	2,400.00
SUB TOTAL	21,100.00
20 percent for freight	4,220.00
TOTAL	25,320.00

NOTE: This list is based in part upon a request made by the Engineering Department to the consultant. Certain items were deleted from this list, including test benches for alternators and fuel injection systems since the suppliers interviewed felt they could made in-house for much less and could be replaced by the equipment set recommended for heavy vehicle maintenance and repair .

Table F4-9

Office Equipment for TCA

Item No.	Description	Quantity	Cost
1	Desk	1	350
2	Desk Chair	1	300
3	Work table	1	250
4	Side chair	2	200
5	File cabinet, 4 drawer	2	260
6	Book case	2	400
7	72" Storage cabinet	1	180
8	Typewriter	1	800
9	Typing table	1	100
10	Typing chair	1	250
11	Misc. supplies	N/A	1,200
12	Display/tape calculator	1	90
13	Bulletin Board	2	150
14	Miscellaneous		450
	Sub total		4,980
	20% for freight		996
	Total		5,976

Table F4-10

Portable Demonstration Unit

Item No.	Description	Quantity	Cost
1	Folding Table	1	100
2	Folding Chairs	6	360
3	Folding Chairs with Table Arm	6	240
4	Easil Pad Holder/Blackboard	1	120
5	Pads		220
6	Miscellaneous		460
	Sub Total		2,500
	20% for freight		[illegible]
	Total		1,800

Table F4-11

Reproduction Equipment and Supplies

Item No.	Description	Quantity	Cost
1	Photocopier with sorter including start-up costs *	1	20,000
2	Phtocopier without sorter including start-up costs	1	10,000
3	Mimeograph	1	650
4	Mimeo supplies		1,200
5	Local Graphics Contracts 5,000 year 1 3,000 year 2 3,000 year 3		11,000
6	Reproduction supplies 5,000 each year		15,000
7	Misc. Office Supplies 5,000 year 1 2,500 year 2 2,500 year 3		10,000
			67,850
	20 prcent for freight		13,570
			81,420

* Should have reduction/enlargement capacity and sorter

ANNEX F-5

Description of the Financial Intermediary

I N D E B A N K

INVESTMENT AND DEVELOPMENT BANK OF MALAWI LIMITED

INTRODUCTION

The Investment and Development Bank of Malawi Limited (Indebank) whose Registered office is Delamere House on Victoria Avenue in the City of Blantyre (P.O. Box 358 Telex 4735) in the Republic of Malawi is a private limited liability company incorporated under the Companies Acts of 1908 and 1913 of the United Kingdom as applied to Malawi under the Companies Act Cap. 46:03 of the Laws of Malawi.

2. OWNERSHIP AND CAPITALISATION

Indebank has an authorised share capital K4.5 million divided into 4.5 million ordinary shares of K1.00 each which are issued and fully paid as follows:-

(i)	Agricultural Development and Marketing Corporation (ADMARC)	1,000,000
(ii)	Commonwealth Development Corporation (CDC)	1,000,000
(iii)	Nederlandse Financierings-Maatschappij voor Ontwikkelingslanden N.V. (FMO)	1,000,000
(iv)	Deutsche Finanzierungsgesellschaft fur Beteiligungen in Entwicklungslandern GmbH (DEG)	1,000,000
(v)	International Finance Corporation (IFC)	500,000
		4,500,000

Indebank's Board of Directors comprises nine members; two appointed by each of the following Shareholders ADMARC, CDC, FMO and DEG and one member appointed by IFC.

3. ORGANISATION AND MANAGEMENT

The Chairman of the Board is normally elected out of the two members representing ADMARC on the Board. The Board meets only a limited number of times a year (quarterly at least).

Currently the following are the Directors:-

1. D.R. Katengeza (Chairman of Admarc) - Chairman representing Admarc
2. L.P. Anthony (General Manager of Admarc) representing Admarc

3. J.R. Tuckett - Representing CDC
4. J. Parrish - Representing CDC
5. F.A.J. Baneke - Representing FMO
6. J.E. Bishop - Representing FMO
7. K. Heidenreich- Representing DEG
8. A. Schwarz - Representing DEG
9. V.S. Raghavan - Representing IFC

The General Manager is appointed by the Board and serves as the Chief Executive of Indebank. He is responsible for the overall operations of Indebank in accordance with the policies established by the Board. He is assisted by the Co-ordinator of Projects Investigation and the Financial Controller/Company Secretary. Annex I shows Indebank's organization chart and Annex 2 provides the curriculum vitae of the three key Management officials.

4. OPERATIONS OF THE COMPANY

Indebank's objective is to invest in financially viable projects which promote the economic development of the country It is a commercial organisation which seeks to deploy overseas sources of funds to supplement local resources in productive enterprises. A high investment priority is given to agriculture and processing of agricultural produce particularly in the export sector. Emphasis is also placed upon agro-industries and manufacturing industry producing local commodities which save foreign exchange particularly the basic industries of food, textiles and engineering. Annex 3 gives the Investment Policy Principles and operating procedures in detail. Revision of these principles is under active consideration.

In furtherance of its development objectives, Indebank can consider participation in limited liability companies or corporations investing by way of local or foreign currency loans or shareholding or both, in projects having development value and operated on a commercial basis. Indebank is a strong and successful development financial institution with a portofolio of K21.6 million of which K5 million is in equity. It enjoys an excellent relationship with international lending agencies.

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It employs 31 staff of whom 19 are professionals. However, Indebank is currently re-examining its role as a development bank with a view to possible diversification into other areas of operation such a leasing finance and agricultural credit.

5. PROCESSING ENQUIRES AND MONITORING LOAN

The procedure for processing enquries for loans is given in annex 4. As far as monitoring of loans is concerned, Indebank does not seek by making of equity investments, to obtain controlling interest in a project or enterprise. It will generally avoid assuming management responsibilities in such projects or enterprises. This does not however preclude Indebank from requiring membership on the Board of Directors of any or all enterprises in which it has outstanding loans or in which it has equity participation.

When deciding upon the amount and form of financial assistance it will provide, Indebank takes into account all the financial requirements of the project and the general financial situation of the borrower in question.

Indebank requires its borrower to provide and to maintain adequate securities, to keep records in accordance with sound accounting practices and to furnish whatever information their operations and accounts Indebank deems desirable. Indebank reserves the right to inspect the enterprises it finances as well as their operations and accounts.

Business secrets and other information furnished by applicants or clients are treated as confidential by Indebank.

6. RESOURCE REQUIREMENTS AND FINANCIAL PROGRESS

The financial results of Indebank for the last five years are given in Annex 5. Indebank forecasts a scale of operations of about K3.5 million in 1984 rising to about K6 million in 1988.

These are presented in summary in the table below:-

APPROVALS	1984	1985	1986	1987	1988
Equity	500	500	550	600	660
Loans:-					
Kwacha	1,200	1,800	1,950	2,200	2,340
Foreign	1,800	2,200	2,500	2,700	3,000
	3,500	4,500	5,000	5,500	6,000

In order to support this level of operations Indebank anticipates establishing further lines of credit with the European Investment Bank and the World Bank. Indebank last increased its capital to K4.5 million in 1978. To negotiate further lines of credit and to make the investments in equity that are possible in the other operations it is felt that Indebank's share capital should be increased by a further K2.5 million. In this way the debt-equity ratio would be maintained and the necessary Kwacha funds would be provided to Indebank. All these are merely management's thoughts and ideas and are subject to the approval of the Board.

COMMODITY ASSISTANCE FROM FOREIGN DONORS

The Federal Republic of Germany has made available to the Malawi Government the sum of DM 13 million by way of grant. The Malawi Government has earmarked 33⅓% of this amount (approx K2 million) for the purchase of 10 special long-haul vehicles for international service from Daimler Benz in the Federal Republic of Germany. Government's proposal to involve Indebank in managing the vehicles on Government's behalf is as follows:-

The Government will turn the trucks over to Indebank to manage on Government's behalf. Indebank will offer the vehicles on competitive commercial terms on either lease or sale terms to proposed "umbrella" organisations or to individual owner operators working under an umbrella organisation. The lease rentals or purchase price realised as the case may be, will be placed in a special trust fund for future use in expanding the fleet, purchasing replacement vehicles or the

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purchase of equipment which will benefit the entire industry. Indebank will be entiled to a management fee for the services so provided. The funds held in trust would with the Government's approval be invested to earn interest and would be disbursed only with the joint approval of the Government and Indebank.

One specialised function of the fund would be the ownership of specialised semi-trailers (such as purpose - built petroleum tankers) which are required for national security but whose utilisation may vary considerably due to changing conditions which it is difficult to foresee with any degree of accuracy. These units would be leased to private operators on a short term basis only so that they could be withdrawn in times and under circumstances when need slackens. In this way the financial burden of specialised equipment required occasionally for national security is carried by the Government rather than the private industr

The Management of Indebank has accepted in principle Government's proposal with final approval subject to Board action based upon specifics. The following are some of the major terms of the Agreement between Government and Indebank in respect of the German aid. These are still under discussion:-

(a) Management Agreement

Government and Indebank will enter into this Agreement under which Government will turn over to and Indebank will take on the equipment to lease or sell on credit or hire purchase to final beneficiaries on behalf of the Government.

(b) Deposit

It is a legal requirment that under a hire purchase deal the buyer (hirer) should pay a deposit. This minimum deposit has recently been reduced from 33⅓% to 20% of the cash price of the equipment. There is no necessity for payment of a deposit in the case of a lease unless as a security refundable on termination of the lease. The same is true with a credit sale. However in both cases a deposit will invaiably be requested if only to cover at least the custom duty payable on the equipment.

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(c) Duration

This will depend on the economic life of the equipment which at the moment is estimated at 4 years. With the recent amendment of the Hire Purchase Act the maximum period within which the full purchase price is payable for trucks is also 4 years.

(d) Interest

This will depend on the type of transaction entered into between the company and the final beneficiary.

(i) Credit Sale (Loan)

Indebank normally charges interest at the rate of 13% on foreign loans and 15% on local or Kwacha loans. Since title to the equipment will pass under a credit sale Indebank will require security from the buyer in the form of Guarantee or Debenture or Bill of Sale.

(ii) Hire Purchase

The interest to be charged is governed by statute. The maximum rate of interest that can be charged is 15.69% in respect of new goods and 17.54% in respect of used goods. No security will be demanded as title remains with the owner.

(iii) Lease

The lease contemplated is financial leasing with the lessee having a right of first refusal to acquire the equipment at the end of the lease period. The rate of interest to be charged is likely to be the same as in (i) above.

(e) Insurance

The lessee, hirer or credit buyer will be required to take out a full comprehensive insurance against the usual risks with the interest of Indobank noted on the policy.

(f) Repairs and Maintenance

These are the responsibility of the final beneficiary and Indebank will ensure that it is complied with.

(g) Hire charges, Lease Rentals or Instalment payments

These will be payable in advance monthly or quarterly in the case of a lease or hire purchase. Indebank will be responsible for collection and depositing them into a bank account to be opened specifically for the fund. The money in the fund will be held to the order of Government.

(e) Reports

Indebank will submit reports to Government on the operation of the fund either monthly or quarterly.

(i) Management Fee

Indebank will charge a management fee to cover the operating expenses of the fund and a modest profit. Normally the company considers a 15% return on investment reasonable.

There are also certain aspects of the Agreement which need to be resolved with Government. For instance:-

(1) who pays duty on the equipment
(2) who provides the initial working capital of the fund.
(3) who bears the cost of storage, security, insurance and maintenance of the equipment when not on lease or hire.

It must be stressed that throughout the period of the lease or hire purchase title in the equipment will rest with Government. Indebank will merely act as agents and conduct itself as such agent in all matters relating to the equipment. Because of the likely commercial and financial risks inherent in the international road haulage industry, Indebank will besides applying its normal commercial criteria in making appraisal of the Lessees and buyers of the trucks, take into account the following matters in screening the applicants:-

(1) track record in international road haulage industry.

(2) possession of all necessary approvals authorisations and consents such as the international certificate of fitness (I.C.O.F.) transport permits to operate in neighbouring countries and international heavy vehicles operators licence.

(3) availability of the market

(4) proof of access to back-up service and preventive maintenance both within the country and in the neighbouring countries.

Indebank has made preliminary investigation into the concept of establishing a subsidiary to provide leasing finance generally in the country and if established the new company may eventually take over the operations. It is envisaged that the required staff will comprise an executive and other staff at a junior level. But the total staff will be small. Motor-dealers and to some extent the commercial banks would be the main competitors in the lease financing since they also provide this type of asset financing. However the terms to be offered by Indebank will be more attractive than the terms currently offered by these institutions namely:-

- a deposit of 33⅓%
- balance payable over a period of 18 - 24 months
- interest charged at the rate of 18% per annum

8. USAID FINANCING

It is understood that the USAID assistance will also be in the region of K2 million by way of grant to the Malawi Government for purchase of another 10 special long haul vehicle for international service. It will be in the form of a line of credit rather than actual physical assets. The rate of interest Indebank will be allowed to charge the ultimate borrowers will not exceed a gross margin of 7% over that which Government will charge Indebank made up as follows:-

- 5% for the fund
- 2% for Indebank to cover its operating expenses and profit.

Nevertheless it is submitted that the same arrangement between Government and Indebank in respect of the German aid should be applicable in this case. In particular the following should be the same:-

(a) the options available to the final beneciary i.e. lease. hire purchase or credit sale.

(b) procedure for processing applications.

(e) interest to be charged to the ultimate lessees, hirers or credit buyers.

The following are, however, some differences with the German aid:-

(a) It is anticipated that DEMATT will provide technical assistance to the owner operators of the trucks.

(b) A Review Committee will be sent up chaired by an official from the Ministry of Transport and Communication and made up of other members from the Treasury, USAID and Indebank to monitor the operations of the fund.

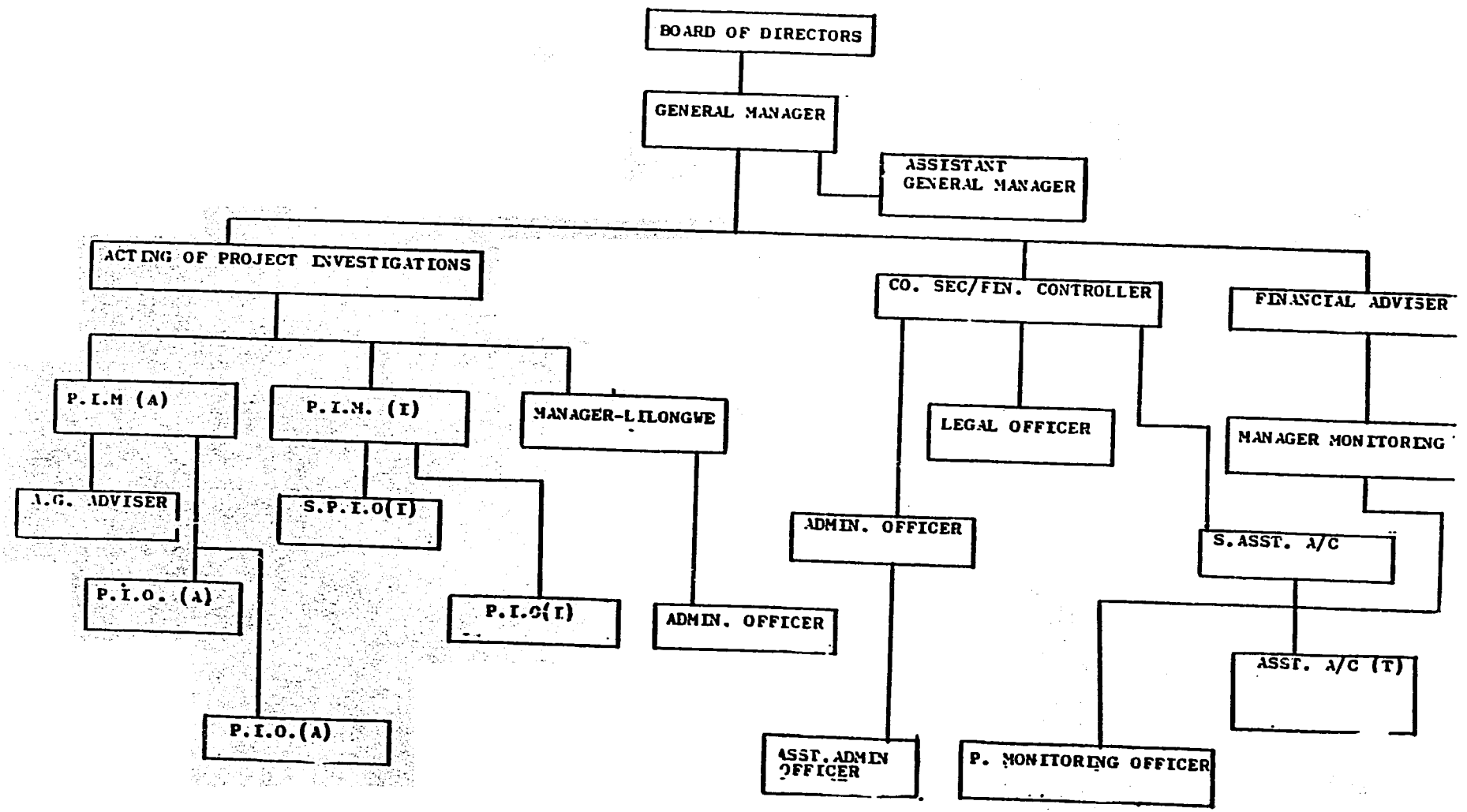
(c) Disbursement of funds from the fund will be controlled by committee comprising officials from the Ministry of Transport and Communications, The Treasury and USAID.

CONCLUSION

The proposed USAID financing will alleviate the transit transport crisis facing the country arising from the weakness and failures in her traditional railway routes to the sea. Currently the international road haulage industry is dominated by foreign based operators simply because the Malawians lack the organisational support, skills and financial resources necessary to compete effectively. Consequently the country is losing a lot of valuable foreign exchange in the transport sector. The USAID financing of this sector would go a long way towards stemming this outflow of foreign exchange.

INVESTMENT AND DEVELOPMENT BANK OF MALAWI LIMITED

ORGANIZATION CHART AS AT 1ST JUNE 1984



CURRICULUM VITAE

JACK THOMPSON - General Manager

A) PERSONAL DATA

Citizenship: Ireland

B) Education:

1951-1962	Sacred Heart College, Limerick, Leaving Certificate (Hons.)
1962-1966	University College Dublin, B.Sc. (Experimental Physics and Mathematics) (Hons)
1967-1969	South-West London Polytechnic (part-time) Associate member of the Institute of Cost and Management Accountants (ACMA)
1972-1974	University College Dublin, Master of Business Administration (Hons)

C) Work Experience

1966-1969	Management Trainee, Marconi Limited, United Kingdom - responsible for the preparation of factory budgets and monitoring of costing programmes; also carried out appraisals of capital expenditure, pricing, and cash-flow implications of long-term projects with developing countries, and special exercises such as auditing of problem accounting areas.
1966-1970	Chief Accountant, Mobile Communications Division (a Marconi subsidiary in Coventry UK) In 1970, the company employed 60 people and had a Sales turnover of £550,000. All manufacturing was carried out by sub-contractors.

- Responsible for the establishment of all financial systems in a newly formed division and for the recruitment, training and management of a staff of 4.

1970-1973 Management Accountant, Asbestos Cement Group, Dublin Ireland.

In 1973, the group employed 500 people in 3 factories and had a Sales Turnover of approximately £5 million. The group was a subsidiary of Cement Roadstone Holdings, the largest industrial Company in Ireland.

- responsible for the development of standard costing and budgetary control procedures, the provision of regular management information and the management of a staff of 5.

1973-1975 Project Officer, Industrial Development Authority.

- responsible for the financial appraisal of projects in the food and health care sectors and the making of recommendations to the Board of the I.D.A. regarding the level of IDA financial assistance.

1976-1978 Manager IDA London Office.

- responsible for the marketing of IDA Programmes to manufacturing companies in Great Britain. This involved meetings with senior management in industry, banking and relevant industrial service organisations, together with initial financial appraisal on projects as they arose.

1979-1982 Senior Consultant, Development Cooperation Division IDA

This Division provides assistance to public officials in developing Courtries in matters of industrial development.

ANNEX 2

INVESTMENT AND DEVELOPMENT BANK OF MALAWI LIMITED

CURRICULUM VITAE

Name	Joseph Gabriel Whelan - Controller of Projects Investigation
Nationality at Birth	Irish
Present Nationality	Irish
Present Address	
Permanent Address	As above
Specialization	Industrial Development

EDUCATION

Dates Attended From	To	Name and Location of Institution of Learning	Academic Decrees and Certs. or Diplomas Obtained	Main Field of Study
1955	1958	C.B. College, Monkstown, Dublin	Honours Leaving Cer.	Commerce English
1961	1965	Dublin College of Commerce, Dublin	Institute oc Cost and Management Accountants Professional Diploma	Accountancy

Special Qualifications I am a fully qualified Cost and Management Accountant

PROFESSIONAL EXPERIENCE

1. From - 1983
   To - Present — Controller of Projects Investigations

2. Employer — Industrial Development Authority Ballsbridge, Dublin 4

   Title of Post and Nature of Duties — Industrial Advisor

   Since 1971 I have been involved with assisting the development of Irish industry. I have worked with most sectors including the food industry, engineering and Construction.

My role was to assess the development potential of the company, to suggest a development path for the company and set Negotiations always took place at the highest level and involved inddigenous Irish companies and multinationals.

Number and kind of Employees suppervised

4 - mainly graduates

3. From - 1969
To - 1971

Employer

Cahill Holdings Limited, Dublin

Title of Post and Nature of Duties

Management Accountant to a holding company involved with approximately 20 companies. Task was to introduce financial controls in these companies and to assist in overcoming development problems.

Number and Kind of Employees supervised

20 - mainly accounting personnel

4. From - 1967
To - 1969

Employer

Kylemore Baker Limited,
Store Street, Dublin

Title of Post and Nature of Duties

12 - office and accounting

5. From - 1960
To - 1967

Employer

CPC (I) Limited,
Goldenbridge, Dublin 8

Title of Post and Nature of Duties

Cost Controller

Maintaining costing information producing accounts and management information such as standard costing report and budgets.

Number and Kind of Employees Supervised

6 - including trainee accountants

From - 1959
To - 1960

Employer

Walls (Ice Cream) Limited
London (A University Company)

Title of Cost and Nature of Duties

Cost Clerk

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ANNEX 2

CURRICULUM VITAE

Name : Vincent Kauluka Robert Ngwira (Company Secretary/ Financial Controller

EDUCATION
ACADEMIC

1962 - 1965 : Cambridge School Certificate at the Malawi College of Commerce

1966 - 1969 : Diploma in Business Studies (Accountancy) with Credit - University of Malawi - The Polytechnic.

PROFESSIONAL

1971 - 1972 : Qualified as Chartered Secretary - Glasgow College of Technology. Admitted as Associate Member in 1972.

: Currently studying part time for the examinations of the Association of Certified Accountants at Professional Level II.

EMPLOYMENT RECORD

Blantyre Water Board:

1969 - 1970 : Accounts Assistant - responsible for the preparation of Debtors Accounts in the revenue Department and reconciliation of accounts; Collection of revenue in arrears; supervision of staff.

1972 - 1974 : Assistant Accountant (6 months) responsible for Stores and revenue accounts and assisting the Accountant in the preparation of Quarterly and Annual Accounts.

1973 - 1974 : Accountant, responsible for the preparation of Quarterly and Annual Accounts and presenting these Accounts at Board Meetings; writing Minutes of Board Meetings and supervision of staff.

Investment and Development Bank of Malawi Limited :

1974 - 1975 Project Investigation Officer (6 months) assisting the Project Investigation Manager in Appraisal of Projects.

1975 - 1977 : Assistant Secretary/Accountant Indebank responsible to the Secretary/Accountant for the preparation of Quarterly and Annual Accounts, Budgets, preparation of Annual Reports; writing Minutes of Board Meetings; Maintenance of Company records; preparation of the General Manager's Report.

1977 - to Present

Company Secretary, responsible for the preparation of Quarterly and Annual Accounts, budgets and Five Year Plan and presenting them at Board Meetings; preparation of Annual Reports and Accounts.

Maintaining the accounting & Legal records of the company as required by the Company's Law Act.

Notifying the Registrar of Companies regarding changes of directors and Share Capital and allotment of shares and filing Statutory Reports.

Arranging Board and General Meetings of the Company, ensuring that all papers to be discussed at the meeting are dispatched in time for the meeting. Taking Minutes and keeping a Minute Book.

: Making calls for Income Notes, Share subscription and Lines of Credit from the Shareholders and Lenders when funds are required for investment.

: Instructing the lawyers to prepare Finance Agreements and Debentures and negotiating with borrowers (on behalf of the General Manager) the terms of investment; ensuring that before funds are disbursed, Finance Agreements are signed and all the preconditions are fulfilled.

: Responsible to the General Manager for all matters connected with the recruitment and training of staff, staff travels, staff welfare, staff Pension Scheme and terms and conditions of employment and housing etc. Responsible for maintenance of property and equipment owned by Indebank.

: Company Secretary of Enterprise Containers Limited Cattle Feedlot Company Limited, Indetrust and Indefund; responsible for secretarial duties of these companies.

: Acted General Manager for Indebank from June to October 1982.

INVESTMENT AND DEVELOPMENT BANK OF MALAWI LIMITED
INVESTMENT POLICY PRINCIPLES AND OPERATING PROCEDURES AS AT 9TH MARCH 1978

1. INVESTMENT POLICY

(1) Principles

(a) The object of the company shall be to assist in the development of the national economy, while at the same time being viable on its own account.

(b) The company shall place primary emphasis on the establishment and expansion of viable agricultural, industrial, extractive and commercial projects, housing, industrial estates, tourism, hotels and lodges, provided it can be shown that they are of value to the economy. The company will not invest in infrastructural projects, such as schools, roads, hospitals etc. and will not provide finance for refinancing operations except in special circumstances involving expansion of existing schemes.

(c) Projects must show clear evidence of aiding the economic development of the country and must be demonstrated to be commercially viable. Investments will preferably be made in limited liability companies formed under the Companies Act.

(d) At the discretion of the company's Board, sponsors themselves will be expected to provide or procure a substantial proportion (not normally less than 25% of the total capital of the project).

(e) Subject to the overriding consideration of sound investment principles, the company will attempt to diversify its investments upon as broad an economic (industry, commerce, agriculture, tourism etc.) and geographic basis as possible, giving no undue weight to any one form of activity or any one area of the country.

(f) The company shall encourage when possible local participation in its ventures.

(g) The company is allowed to consider investments in the share capital of any enterprise provided that it is clearly established that the prime motivation of such enterprise is to operate profitably and to provide fair, reasonable and regular dividend payments to its shareholders.

(2) <u>Investment limits</u>

The investment limits of the company in any project shall be decided by the Board from time to time having in mind: (i) that any such investment limit shall be flexible enough to permit financing of

suitable projects of particular national importance in excess of the amount of the limit. (ii) The capital resources available to the company. (iii) The necessity of achieving within the company portfolio, a diversity of investments in accordance with the company's principles.

Following the above decision:

1. The management is instructed to submit requests for clearance in principle to shareholders concerning all applications for investment by INDEBANK up to a maximum of K1,000,000 and is authorized to do this without having asked and received prior approval of the Board.

2. The management is instructed to submit requests for clearance in principle to shareholders concerning all applications for investment by INDEBANK in excess of K1,000,000 only if it can be shown that the project is of particular national importance.

3. Management is instructed in cases referred to under 2. to submit to the Board, a statement clearly outlining the cogent reasons why it supports submission of a request for clearance in principle to shareholders which is exceeding the approval limit of K1,000,000.

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4. Management should initially seek to obtain Board clearance in principle where projects are in excess of K1,000,000 by a Board Circular Resolution. In the event that unanimous approval in principle is not forthcoming by such a resolution then investigation of the project should be deferred until the Board Circular Resolution has been submitted for approval at the next following Board Meeting.

(3) Control and Management

(a) Investment by the company in the equity of a project will not usually exceed 35 per cent of the total equity.

(b) The company will not take any interest in a project which would give it primary responsibility for the management of the project, provided always that this consideration will not inhibit the company from assuming control of any enterprise if it deems this necessary to protect its investment.

(4) Equity/Loan Ratio

Investment may take the form of shares or loans or both, depending entirely on the merits of each individual project. As to the company's overall investment portfolio, management will seek to maintain a prudent ratio between the company's overall share and loan holdings, which ratio shall be determined

by the Board from time to time. This ratio shall not be applied to any individual investment but be used as a guide to overall investment policy.

(5) Shares

No investment shall be made in the shares of any project where for any reason raw material or output does not appear to be bought or sold under "arms_ length" conditions unless specific guarantees are given.

(6) Loans

(a) This will normally be in the form of secured debentures. The company's position as a lender will not normally be subordinate to that of any other lender. In cases where a debenture is not appropriate to the type of finance required, preference shares or other form of investment may be considered, with or without cumulative dividend and/or conversion rights; as considered appropriate.

(7) Loan interest rates

Rates of interest will vary with the type of loan and its duration, the risks involved and the security offered, including any guarantees obtainable. Loan rates will be kept under review in the light of prevailing rates locally and overseas and the need to service the company's own capital.

(8) Repayment of loans

The duration of a loan will normally be not shorter than 5 years and not longer than the economic life of the main assets on which it is secured. The company will not normally provide short term finance and will not compete with commercial banks by providing seasonal working capital except as part of the permanent capital required by the project.

(9) Currency

The company shall not make any equity investment in any currency other than the currency for the time being of Malawi nor any loan investment in any currency other than those currencies which it has itself borrowed from lenders outside Malawi.

(10) Fees and charges

Where appropriate, the company will charge fees for investigation and other specialist expenses connected with a project. A commitment fee of 1% on undrawn balances of the loan will normally be charged.

(11) End finance

The company shall normally require all sponsors to give a written undertaking to be responsible for providing or procuring any end finance that may be required over and above that of the project capital estimates.

(12) Other investors

Where a project requires finance in excess of that obtainable from the company, the company will try to interest other finance houses in investing. The company will see to it that finance made available to the project by other investors will be provided on conditions acceptable to the project and the company.

(13) Government policy

No investment shall be made in any project which does not conform to Government policy.

(14) Training

The company shall pay particular attention to the training of local individuals at all levels in the company and in each project.

(15) Project Boards

Where the company's investment in any project is substantial, the company will normally seek the right to a seat or seats on the project Board to be decided on the merits of each individual case.

(16). Project Management

No investment shall be made in any project unless the company is satisfied that adequate arrangements have been made to ensure competent and continuous management of the project.

2. OPERATING PROCEDURES

(1) Management

Subject to Board direction on matters of policy and on matters coming under Board jurisdiction by reason of the Companies Act and the Articles of Association of the Company, the General Manager shall have the general control and management of the company's business.

(2) Investments, commitments, etc.

The General Manager shall not have the power to make investments (other than short term deposits of funds not immediately required) or incur commitments or liabilities on behalf of the company without prior approval of the Board. In cases of emergency (e.g. where the company's investment is in jeopardy) he may commit up to a total of K20,000 to any one project after consulting the Chairman.

(3) Board papers

Board papers shall represent the views, advice and recommendations of the General Manager only, and shall in no way commit the Board until approved, notwithstanding any prior consultation with directors.

PROCESSING ENQUIRIES

1. Project enquiries or applications arise in a variety of ways and while it may not be necessary for the General Manager (GM) or the Controller of Investigations (CI) or Project Investigation Manager (PIM) to hold preliminary discussions with a prospective borrower, a record of all such meetings should be made and circulated to the CI and PIM forinformation.

2. At an early stage the authority of the CI should be sought to proceed with the follow-up to a preliminary enquiry.

3. As a general rule the PIM (or the CI where considered appropriate) should after the first preliminary meeting assume responsibility for dealing with the client outlining Indebank's general terms and conditions of investment and providing the client with a copy of the Indebank Investment Pamphlet.

4. The Client is asked to submit his application to Indebank together with copies of the Client company Memarts (if applicable) and other relevant legal documents, together with financial and operational data for the future of the project and past results (if applicable).

5. Some clients may require Indebank's assistance in completing certain aspects of their application; if so the PIM would normally allocate the responsibility to a PIO.

PROCESSING APPLICATIONS TO CLEARANCE IN PRINCIPLE

1. All applications received by Indebank must be acknowledged immediately. They are in the first instance sent to GM, then to CI who in turn allocates the application to PIM's.

2. At an early stage the PIM is responsible for ensuring that the application has been acknowledged and for entering the application in a project record file and allocating it a reference number.

PRELIMINARY APPRAISALS

1. These are preliminary assessments of investments proposals to determine whether an application warrants a more detailed analysis and preparation of a Clearance in Principle Paper. The pre-appraisals focus on the main issues and major aspects of the investment proposals at an early stage to enable Indebank to sort out acceptable from unacceptable proposals and at the same time avoid delays in appraisal of desirable projects.

   The Project Appraisal Team which normally comprises the PIM and PIO focus on:

   i) Whether a proposal is within Indebank's Investment Principles in terms of nature, size, location, sector priority and exposure, and national importance to Malawi.

   ii) Whether additional information is required to enable the PIO to proceed.

   iii) The state of completeness and quality of the proposal especially in regard to technical aspects, capital cost estimates, commercial aspects, production process, organisation aspects and the validity of all the sponsor's assumptions on these aspects.

   iv) The present position of investigations in connection with surveys, borings, designs, contract awards and whether such awards were based on competitive bidding and the progress to

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date in connection with these aspects.

v) Planned construction schedule, appropriately broken down by major items of the project. Procurement and delivery schedules for machinery and equipment.

vi) Plans for obtaining engineering services for design, preparation of specifications, preparation of contract documents, evaluating bids, awarding contracts and supervision of construction, mention of special consultants and responsibilities to be assigned to them should be included.

vii) Plans for implementation of the project, particularly as to work to be done and materials and equipment to be supplied by the applicant, the equipment suppliers, construction firms and type of contract, performance guarantees and availability of competent personnel.

viii) Laws and regulations pertaining to import duties, exchange control, operating licences, insurance regulations and coverage etc., as they affect the proposal.

ix) Plans for operating and maintaining the completed project, covering availability of competent personnel and proposed recruiting and training programmes.

x) The financial, management and technical competence of the sponsors and if they do not intend to execute the project, details of the planned arrangements with the agency which will have this responsibility and its suitability.

xi) The finance sought from Indebank in relation to the total cost of the project, the proposed financial structure, sources, amounts and availability of additional funds required, exemptions from various taxes and import duties, nature and amounts of other subsidies.

xii) The credit worthiness of a proposed borrower: his company's or project's ability to generate cash to repay the Indebank loan (and other loans) and to provide worthwhile security.

xiii) Preliminary conclusions regarding the financial and economic viability and technical soundness of the project and the soundness of the proposed borrower or equity partner.

2. After the above preliminary assessment of a project the PIM prepares a draft Clearance in Principle Paper in consultation with the CI for detailed consideration by the GM.

3. The CIP paper will outline the project proposals and will meet all the requirements of the CIP policy of the Board as follows:

a) When an application for an investment is received by the company and the GM feels that this application justifies further investigation, he shall forward to the Directors of the company a request for clearance in principle to proceed with detailed investigation of the project. Such a request shall comprise essential basic information concerning the investment applied for, such as information relating to sponsors and their background, nature of the project, supply, marketing and other commercial arrangements, total costs, proposed capitalisation, indicated profitability and management, development value and acceptability to the country.

b) Management shall state whether or not the proposed investment and the project appears to conform to the general principles as set out herein.

c) This clearance in principle procedure, as referred to in (a) above, will not be required in the case of application for supplementary finance from existing projects unless the considerations of principle applying or the capital structure of the project envisaged when finance was first approved for the project have changed materially.

d) It shall always be the responsibility of the full Board of Indebank to decide upon the commercial prospects of any project. Accordingly, the procedure for clearance in principle is designed to ensure that none of the shareholders (represented by its duly

appointed Directors) is precluded by any statute, Government order or decree applicable to it or by its own charter or constitution from directly or indirectly participating in any particular project.

e) If management does not receive from all or any of the directors within a period of thirty days of the request either an intimation of the existence of such a prohibition as is mentioned in paragraph (d) above or the clearance in principle requested as above, detailed investigation of the project upon which the Board's final decision shall be based shall proceed.

4. After the GM has approved the project proposal the Clearance in Principle Paper will be despatched to all Directors of Indebank requesting approval to proceed with a full investigation.

5. When approval has been received from all Directors or providing rejection has not been received from any director and a month has elapsed after despatch of the CIP, the PIM or PIO concerned contacts the applicant and after consulting with CI initiates detailed appraisal work.

6. In the case of rejected applications, the CI is briefed before the decision is communicated to the applicant. The reason for the decision may be (where possible) explained orally before writing to the sponsors.

ANNEX 5

BALANCE SHEET	1979	1980	1981	1982	1983
FUNDS EMPLOYED	K	K	K	K	K
Shareholders fund	4,258,434	4,851,293	5,012,943	5,054,693	4,755,596
Income Notes	8,120,000	9,000,000	9,000,000	9,600,000	10,800,000
Lines of Credit	1,766,008	3,614,575	6,032,976	7,301,377	8,680,049
TOTAL FUNDS EMPLOYED	14,144,442	17,465,868	20,045,919	21,956,070	24,235,645
EMPLOMENT OF FUNDS					
Fixed Assets	338,963	356,309	333,460	332,672	360,243
Investments	12,390,550	14,758,119	12,183,611	18,514,051	18,113,405
Current Assets Debtors	546,474	554,058	559,976	817,636	1,228,428
Current Maturities - Loans	896,331	1,306,627	1,690,820	1,908,658	2,234,550
Local Registered Stock	670,000	840,000	1,062,000	1,218,610	2,909,595
Taxations recoverable	16,912	15,351	-	203,334	472,304
Unpaid calls on shares capital	-	265,000	-	-	-
Dividends receivable	240,380	363,843	310,556	360,187	-
Bank balances and cash	249,895	81,334	518,598	588,819	1,119,556
TOTAL CURRENT ASSETS	2,619,992	3,426,213	4,141,950	5,097,244	7,964,133
CURRENT LIABILITIES					
Current Maturities of lines of credit	-	28,163	442,906	723,043	1,043,170
Creditors	1,051,513	881,410	949,365	1,139,605	1,001,766
Proposed dividend	153,550	165,200	178,716	125,249	157,500
Taxation payable	-	-	42,115	-	-
	1,205,063	1,074,773	1,613,102	1,987,897	2,202,436
NET CURRENT ASSETS	1,414,929	2,351,440	2,528,848	3,109,347	5,761,997
TOTAL EMPLOYMENT OF FUNDS	14,144,442	17,465,868	20,045,919	21,956,070	24,235,645

PROFIT AND LOSS ACCOUNT

ANNEX 5

	1979	1980	1981	1982	1983
	K	K	K	K	K
INCOME					
Interest of Loans	978,771	1,131,477	1,426,319	1,663,887	1,870,482
Dividends	452,645	544,080	577,546	777,422	959,081
Investigation and Commitment Fees	25,554	64,034	26,234	62,149	39,321
Investment on Local Registered Stock and cash at bank	46,779	104,447	131,256	185,454	270,533
Profit on sale of fixed asset	2,300	5,333	37	12,200	3,936
Other income	16,216	39,024	57,564	45,269	72,276
Total income	1,522,265	1,888,395	2,218,956	2,746,381	3,215,629
EXPENSES					
Charges on borrowing:-					
Interest income notes	636,344	684,222	720,000	722,301	771,485
Interest on fees - lines of credit	86,795	178,271	326,867	520,682	638,422
Total charges	723,139	482,493	1,046,867	1,242,983	1,409,957
Administration expenses:-					
Staff costs	233,393	247,131	208,061	236,882	312,352
Travelling	30,696	51,829	60,521	68,907	46,919
Office rent and repairs	25,238	52,549	53,972	61,159	62,054
Staff housing	19,771	35,432	48,988	64,407	56,082
Auditors remuneration	2,697	3,694	4,656	4,483	6,651
Depreciation	32,915	40,652	38,722	38,293	48,198
Directors8 fees and expenses	7,377	9,805	12,081	14,961	12,518
General	44,828	55,310	62,709	71,776	84,396
Provision for dimmition in value of investments	-	-	22,000	440,471	921,975
Provision for bad debts	-	-	18,000	145,000	(135,823)
Total administration expenses	396,915	496,452	529,710	1,146,339	1,415,324
Total expenses	1,120,054	1,358,845	1,576,577	2,389,322	2,825,281
Profit Before Taxation	402,211	529,450	624,379	357,059	390,348
Taxation	186,778	246,391	302,013	190,060	171,758
Net profit for the year	215,433	283,059	340,366	166,999	218,290
Proposed Dividend	153,550	165,200	178,716	125,249	157,500
Retained Profit for the year	61,883	111,859	161,650	417,750	61,090

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ANNEX 5

PROFIT AND LOSS ACCOUNT

INCOME	1979	1980	1981	1982	1983
	K	K	K	K	K
Retained Profit for the year:-					
- As previously reported	-	-	-	279,509	321,259
- Prior year adjustment	-	-	-	(310,556)	360,187
Retained Profit at end of the year	-	-	-	(31,047)	(38,928)
	-	-	-	(38,928)	22,162
Earnings per share	6t	7t	8t	3t	5t
Dividend per share	4t	4t	4t	3t	3.5t

ANNEX F6

JOB DESCRIPTIONS FOR PROPOSED TECHNICAL ASSISTANTS

The following positions have been proposed for providing the necessary technical assistance during the project:

- Senior Transport Advisor to the MOTC (3 years)
- Senior Transport Officer for the MOTC (2 years)
- Training Coordinator/Advisor (3 years)

An outline of their proposed scopes of work and individual job descriptions are given hereafter.

Technical Adviser No.1

Title: Principal Transport Advisor

Position: Technical adviser to Ministry of Transport and Communications

Location: Headquarters MOTC - Lilongwe

Duration: 3 years

Qualifications Masters degree in transport planning/economics. At least 7 years experience in multi-modal transport planning with special emphasis on transit problems in landlocked countries.

Duties and Responsibilities: The expert will work under the direction of the head of the Transport Department at MOTC headquarters. His duties will include:

Advise and assist the Ministry of Transport and Communications to develop a realistic and coordinated policy framework providing clear direction and means for alleviating the existing transportation constraints.

Advise and assist the Ministry of Transport and Communications to develop an institutional capability to monitor, manage and plan for international commodity flows on a sustained basis, and to effectively implement its transport related policies and projects designed to alleviate the existing transportation constraints.

Monitor and assess transit transport routes, transport equipment, services and operations to ensure continuous, reliable, cost efficient performance. Identify bottlenecks, constraints and problem areas and reduce their impact on the cost and performance of international transport activities.

Supervise collection, organization and analysis of data concerning transit traffic flows in and out of Malawi and prepare summaries and conclusions of such analyses for key policy decision makers in government and the private sector.

Assist in preparation and negotiation of bilateral transportation agreements between Malawi and other neighboring countries for promoting the rapid and cost effective movement of cargoes within the region.

Act as adviser to the Malawi Transport Committee Task Force which has been established to coordinate public and private sector transportation flows and jointly suggest needed actions to improve cargo movements.

Advise the Government continuously on appropriate measures to be taken to resolve numerous and often unpredictable transport situations as they develop.

Assist in the preparation and implementation of contingency plans for emergency routes, services and operations as required to ensure the continued movement of Malawi's priority commodities.

Develop and coordinate plans for use by Government and private industry designed to help improve long term transport performance and reduce costs of moving commodities in and out of Malawi.

Provide technical input and direction as required for surveys, feasibility studies, short and long term plans designed to improve and expand the operational capabilities and capacity for long-distance international transit transport by Malawian road haulers.

Advise and assist Malawian organizations and institutions to gain greater control over their own import/export traffic.

Advise as to means for promoting and strengthening private sector international road transport capabilities of Malawian firms and individuals in a rational and cost effective manner.

Provide training to counterparts within the Ministry of Transport and Communications

Technical Adviser No. 2

Title: Senior Transport Officer (Planning)

Position: Technical Assistant to the Ministry of Transport and Communications

Location: Headquarters MOTC - Lilongwe

Duration: 2 years

Qualifications: Masters degree in transport economics or transport planning and five years of transport planning experience.

Duties and Responsibilities: The expert will work under the direction of the head of the Transport Department at Ministry Headquarters. The Transport Department is responsible for helping the Ministry plan, coordinate, monitor and operate transport systems in Malawi. It provides data, economic and financial analysis, and detailed planning inputs including project appraisal to the work of the Ministry.

The expert will work maily on road transport matters and the monitoringm forecasting, planning, and facilitation of international trade flows. He will also undertake other arrangements from time to time as directed by the head of department.

1. Development of Transport Services

Prepare forecasts for international and regional road traffic. Forecasts shall serve to indicate the essential transport requirements over the next five years. Forecasts shall be used in the evaluation of the adequacy of existing facilities and in connection with the development programs and projects referred to below. Forecasts shall be prepared in consultation with transport agencies, users, EPD and other organizations involved.

Collaborate with Ministries, transport agencies (domestic and foreign) and EPD officials in the establishment of suitable criteria for evaluating the adequacy of existing international and regional road transport facilities and services.

Appraise the adequacy of existing road transport facilities routes and services in close collaboration with the transport agencies and users concerned.

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Analyze requests for changes in charges, tariffs, licencing and other economic regulations. Review shall take into account all factors involved including transport costs, competition, markets etc. and shall be conducted in collaboration with transport operators, users, EPD and other organizations involved.

Review the need for better coordination among the transport agencies and users for expediting and coordinating the movement of international traffic.

Review the availability of information and data relevant to the foregoing tasks and make recommendations for any new data collection activities which are considered necessary.

2. Preparation of Development Programs

Direct and supervise compilation and updating of road and international trade development programs within the Ministry in association with the relevant transport agencies concerned.

Appraise such programs for consistency with the given objectives, priorities and policies of Government, in close collaboration with the Ministry officials, OPC, EPD and Treasury.

Appraise the effects of these development programs on related current expenditures and reviews in close collaboration with the agencies concerned.

Monitor program implementation with regard to budget and other criteria, and discuss findings and recommendations with Ministry officials concerned.

3. Identification and Appraisal of Development Projects

Work with transport agencies, EPD and Treasury officials for the purpose of identifying road and road transport development projects, and requirements for project appraisal and financing.

Appraise each project in terms of its socio-economic and financial implications as appropriate. Supervise the hiring of and monitoring of and work with consultants to undertake detailed feasibility studies, where necessary.

Direct and supervise the preparation of briefs on each project approved by the Ministry. Briefs shall be submitted to the Development Division, the Economic Planning Division and Treasury, in accordance with procedures laid down by the Office of the President and Cabinet (Development Division).

Monitor progress in the implementation of all road and international trade development projects for which the Ministry is responsible or in which it has an interest. Budgets, costs and other aspects of performance, including the performance of consultants, shall be subject to review.

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Technical Adviser No. 3

Title: Training Coordinator/Advisor

Position: Technical Advisor to training institutions and to the Road Traffic Commissioner

Location: Road Traffic Commissioner's Office - Blantyre

Duration: 3 years

Qualifications: Degree/diploma in education on training. Masters degree in business administration or training, with desired experience in management training and on-the-job training in trucking operations.

Duties and Responsibilities: Assist in development and implementation of overall training programs and development of specific courses with DEMATT and Polytechnic staff.

Supervise and advise on-the-job training within selected umbrella organizations. Review owner-operator training requirements.

Work with DEMATT in screening of transport firms for training. Review training needs assessment.

Provide technical assistance to the Road Traffic Commissioner's Office in the development of licensing and vehicle inspections systems.

Assist in specific development of short courses at the Polytechnic concerning financial management, operational planning, terminal operations, long distance driving, preventive maintenance etc.

Prepare a schedule for implementation of the training program and identify the needs for any short term technical assistance, and coordinate its implementation.

Serve as secretary to the Training Task Force and the MOTC Project Director when required for project monitoring, implementation and evaluation workshops.

Undertake continuous monitoring and evaluation of the program and work closely with MOTC and USAID in program development.

Provide support and assistance for procurement and operation of vehicle inspection equipment for the Road Traffic Commissioner's Office.

Provide support and assistance for the data base management functions in the Road Traffic Commissioner's Office.

Short-Term Technical Assistance

Several types of Short-Term Technical Assistance has been identified as necessary to the project, however the length and timing of this assistance remains to be specified during project implementation. The following specialists will be required. (Respondants to the RFP may also propose additional staff that they consider may be pertinent to project requirements.)

1. Specialist in International Heavy Vehicle Driver Training and Licensing

   This person would have at least a bachelor's degree in education or training (graduate degree is preferable) and experience in the design of international driver training programs and licensing courses and procedures. Experience with trucking operations in developing countries is desired.

2. Trucking Industry Management Specialist

   This person would have at least a bachelor's degree in management and more than 5 years experience in international trucking. Experience in trucking operations in developing countries is desired. Specific training experience in management of trucking is also preferred. Preference will also be given for African experience.

3. Specialist in On-the-job Training for Trucking Personnel

   This person would have practical experience in on-the-job training in workshops and/or other facilities that required on-the-job training. Bachelor's degree in training is preferred, and 5-10 years experience in developing countries. Preference will be given for African experiece.

4. Fleet Management Specialist

   This person would have 10-15 years practical experience in fleet management for international trucking firms. At least a bachelor's degree in management is desired. Experience in developing countries and particularly Africa is preferred.

5. Vehicle Inspection Systems Specialist

   This person will have 5-10 years experience with vehicle inspection systems training and equipment. At least a bachelor's degree is preferred, and experience in developing countries, and Africa in particular is desired.

6. Data Base Management Specialist

This person will have a master's degree in data processing or computer science, with 5-10 years experience in data base management applications. Familiarity with the Burroughs Data Manager program or the equivalent is desired. Experience in training, especially in developing countries will be preferred. Experience with vehicle statistics and data base is also desirable.

Other types of short-term consultants will be identified during the project implementation, and therefore respondants to the RFP may also list other types of staff in areas related to the project who are available.

The successful bidder will be requested to subcontract part of the work to qualified local individuals or firms, where this appears to be cost-effective.

ANNEX F7

EQUIPMENT LISTS

1. Trucking Equipment

Approximately $2,500,000 of international trucking equipment will be acquired according to the following specifications. The actual number and type of tractors (horses) and trailers will be determined by the users/buyers group.

Truck Equipment Specifications and Evaluation

Generally the specifications should include reference to 28-32 ton capacity vehicles operating primarily on gravel or "off road" conditions with up to 12% grades.

A. Tractors

1. 300 - 350 HP
2. Twin axle drive, 9-15 speed gear box
3. Reinforced chassis frame, all bolted construction
4. Normal or semi-forward cab, right hand drive
5. Preference for SKD (semi-knocked down) kit to be assembled in Malawi to minimize transport costs

B. Trailers

1. Three types may be included: flat bed, box or tanker (the exact numbers of each will be decided at the time the IFB is finalized, based on the requirements of the purchasers) with a 28-32 ton capacity.
2. Triple axle
3. Reinforced chassis frame, all bolted construction
4. Preference for CKD (completely knocked down) kits for assembly in Malawi

C. Training Equipment

The successful bidder will be required to supply one set of power train components to the Polytechnic for training uses, plus a kit of any specialized tools needed for repair or maintenance.

D. Delivery Date

The soonest possible delivery date is preferred since this is an immediate need. If the supplier can deliver in 3 months or less this is preferable. Penalties may be assessed for late delivery.

E. Spare Parts

The bidder must show that sufficient spare parts will be available in Malawi. The IFB will specify minimum quantities required. Preference will be given to bidders who can show parts availability in Zimbabwe, Zambia, South Africa and Tanzania through dealer networks who have agreed to cooperate with the supplier. Dollar amounts of present parts inventories for the specific vehicle components proposed will be requested. Bid evaluation will look closely at parts inventory levels and award additional points to bidders who offer support beyond the minimum requirements.

F. Maintenance

Specific capability to maintain the proposed vehicle and all its components will be required in Malawi. Capability to provide this service must be demonstrated with the number of locations, trained mechanics and other pertinent facts presented. Maintenance capabilities and agreements in each of the following countries: Zimbabwe, Zambia, South Africa, and Tanzania will be evaluated as well.

G. Training

A training program will be required of the successful bidder to train owner-operators and/or driver/mechanics in maintenance, service and general vehicle operation requirements and procedures. This will involve the provision of training facilities and complete audio visual aids in Blantyre or Lilongwe (both prefered). The bidder should specify the training space available, number of trainers on full time payroll and specialists available at no additional cost, on each aspect of vehicle operation and maintenance. Additional training services available in Malawi by other suppliers, if any, should also be specified.

H. Proof of Performance

The bidder should offer proof of performance of the vehicle in the proposed configuration under the conditions prevailing in Malawi and/or other Southern African countries. The existence of fleets of vehicles operating in the area over a period of several years will be sufficent. Otherwise specific documentation should be provided. Specific references for fleet operators should be supplied.

I. Evaluation of Bids and Proposals

A weighting scheme will be used whereby cost is the major factor, but is also weighed against the other factors specified above. The preliminary weighting proposed is:

1. Price 50% (low bidder gets 50%, other bidders get a maximum of 30% if within 5% of low bid)
2. Delivery Date 5%
3. Spare Parts availability 10%
4. Maintenance capability 15%
5. Training capability 20%

The performance test in G must be passed and adequate maintenance facilities must exist in Malawi in order to qualify for the rest of the evaluation.

This evaluation procedure will be finalized as part of the preparation of the IBF by INDEBANK with USAID assistance.

J. Bidders will be instructed that CIF prices must be quoted in their bids on a per unit basis. Otherwise transport costs, insurance and handling fees will be quoted on the entire lot of equipment as a single cost. Since not each buyer within the buyer's group will be purchasing the same equipment, INDEBANK must be able to assess varying amounts of the above costs to each item and each loan account. Responsibility must be clearly indicated to the bidder in the IFB to provide the necessary cost breakdowns. This will avoid confusion once accounts are settled and take title.

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2. Computer Equipment

Several discussions were held with BURCO Electronic Systems Limited who are the suppliers of Burroughs computers in Malawi. These are the computers selected by the Government of Malawi for standardization, and a B20 series microcomputer is presently utilized in the Ministry of Agriculture Planning Division. An MOTC program has recently been created for this machine and BURCO staff appear to offer excellent software and maintenance support.

As a result of this programming work, BURCO is familiar with MOTC needs and applications. The discussions centered on the minimum cost-effective configuration which would meet these needs. The PP design team feels that the system described in the attached pages meets these criteria. As shown, a 10% discount on list prices is anticipated.

3. Training Equipment

See lists contained in Annex 4.

4. Vehicle Inspection Equipment

Four types of equipment were specified, but no specifics are available. This list will be drawn up by the Training Coordinator in conjuction with the Road Traffic Commission. An estimate of $50,000 was used to cover:

a. Brake Testers (2)

b. Emission Testers (2)

c. Headlamp Testers (2)

d. Wheel Alignment Testers (2)

5. Vehicles for MOTC

Three vehicles are anticipated for MOTC for use by the Technical Assistants. There is no problem with vehicle source, since the USAID Mission has a blanket waiver for vehicles. The cost estimate is based on a duty-free price quotation for Opel as follows:

Opel Kadett Stationwagon	$12,000
Opel Ascona 4 door sedan	$14,000

One Kadett and two Ascona's would meet the MOTC requirements for one town car and two highway vehicles.

KAMUZU HIGH
BLANTYRE, MAL
P.O. BOX
PHONE: 631 577 / 631
TELEGRAMS: 'BUR

BURCO ELECTRONIC SYSTEMS LTD.

EXCLUSIVE DEALER AND MAINTENANCE ORGANISATION FOR BURROUGHS PRODUCTS IN MALAWI

30th May, 1984

The Projects Officer
U.S. Agency for International Development
P.O. Box 30455
Capital City
Lilongwe 3

Attention Mr. Peter Cook.

BURROUGHS B25 MICRO COMPUTERS - MALAWI GOVERNMENT.
MINISTRY OF TRANSPORT AND COMMUNICATIONS.

We refer to discussions between your Mr. Peter Cook and our Mr. David Smith concerning the supply of disk based Micro Computer systems to the Ministry of Transport and Communications in Lilongwe and, the Road Traffic Commissioner in Blantyre and, have pleasure in confirming the prices and configurations of the systems discussed.

We shall, as we have already done for the Ministry, be prepared to develope whatever software is required for these installations but, as we are sure you will appreciate, we cannot provide you with a quotation for this work until precise systems specifications have been produced.

Our quotation follows and we look forward to working with you on these projects.

Yours faithfully
for: BURCO ELECTRONIC SYSTEMS LTD

D. A. WARNDELL
MANAGING DIRECTOR.

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QUOTATION

	UNIT COST US.$	TOTAL U.S.$
2 Burroughs B25-65 disk based Micro Computer systems equipped to Standard Malawi specifications including:-		
* 8 MHZ 16 bit processor		
* 512KB Memory		
* 2320 Character display		
* Malawi Standard Keyboard		
* Malawi standard character generator		
* Malawi standard power supply		
* 10MB Winchester disk		
* 1MB 5¼" Flexible Disk		
* 160 C.P.S 132 column Printer	12,900	25,800
Less 10% Discount		2,580
Total Nett:-		23,220

Maintenance.

A fully comprehensive maintenance contract is available which includes all spare parts, labour and transport costs, in both Blantyre and Lilongwe for an annual premium of U.S. $2,200 per system.

Delivery

Based on the latest information from Burroughs Corporation we estimate delivery could be effected by mid August, 1984.

QUOTATION

SYSTEMS AND APPLICATION SOFTWARE PER MASTER SYSTEM

		PURCHASE PRICE US.$	ANNUAL LICENCE FEES U.S.$
B20CST	B25 Customiser including:-		
	* BTOS Operating System		
	* 15AM File Handling System		
	* Cobol Compiler		
	* Fortran Compiler		
	* Pascal Compiler		
	* Basic Compiler		
	* Form	1,850	370
B20 DM	Data Manager (Program Generator)	750	150
B20 BMP	Multiplan (Electronic Spreadsheet)	200	40
B20 WRT	Writeone (Word Processing)	550	110
	Total U.S.$	3,350	

BURCO

ANNEX F8

ECONOMIC ANALYSIS

1. External Trade and Road Haulage Demand Analysis

A. Description of international haulage routes and recent commodity movements

As described in Annex F2, the Republic of Malawi is dependent on transit via neighboring countries for its principal exports and imports. A major reduction in rail capacity in Mozambique has shifted 50% of imports and exports from rail to road transport. At present there are only two international road links with adjoining countries:

- the road to Lusaka, Zambia, via Mchinji; and,

- the road to Harare, Zimbabwe through Tete Province, Mozambique via Mwanza.

A further road is planned to be opened up into Tanzania in 1985, with limited capacity which will be increased over the next five years. An additional constraint is felt by truckers using the road via Tete, as they are subject to insurgency action in Mozambique, making travel dangerous and less reliable, necessitating the use of convoys with Zimbabwe Army Guards.

B. Demand Analysis for Trucks

It has been shown that there is demand for the movement of about 800-850,000 tonnes of commodities annually in and out of Malawi. Of this, about one quarter of all the dry imports/exports and about one half of the fuel should be transported by rail. This leaves about 600,000 tonnes of goods to be transported annually by road. Some of this transport demand is not currently being met.

Given the difficult environment in which Malawi finds itself, four scenarios have been considered for developing hypotheses concerning the demand for transport in the next five years. Each of these scenarios results in a different outcome having a differing impact on the road transport sector.

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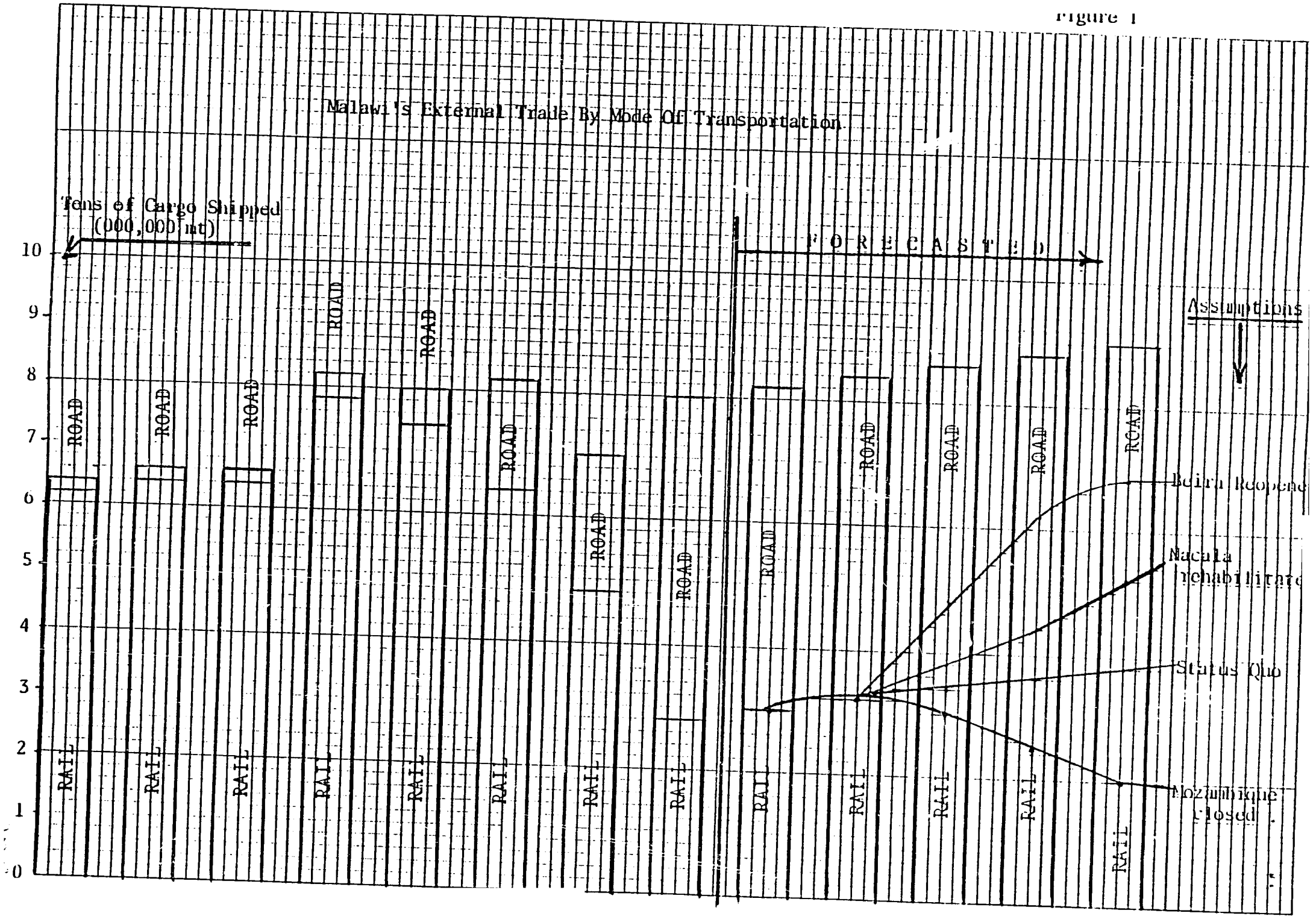
Figure 1


Malawi's External Trade By Mode Of Transportation
Tons of Cargo Shipped
(000,000 mt)
10
9
8
7
6
5
4
3
2
1
0
ROAD
RAIL
FORECASTED
Assumptions
Beira Reopene
Nacala
rehabilitate
Status Quo
Mozambique
Closed

Scenario 1: Continuation of the present situation until 1989

The total demand for transport by road under this scenario is shown in Table 9, along with the associated demand for truck trips and the potential for the Malawian truck fleet. The range of new vehicles needed in the Malawi fleet ranges from 90 to 99, under present conditions, over the next 5 years.

Scenario 2: Beira Line reopens after 1985

Under this scenario, the Mozambique conflict is resolved, and the Beira line gradually comes back into service. The Nacala line is rehabilitated as planned, and the treaty between Mozambique and Malawi concerning railroad use (65% Nacala - 35% Beira) is applied.

This would result in a gradual shift of traffic back to the rail routes of up to 70% of total import/export traffic. The international road haulage industry would still be more important than it was before 1982, due to the shift toward regional trade, and the improved access to neighboring states, but the tonnage hauled would decrease sharply from the present.

The potential for Malawi trucks under this scenario ranges from 28 to 80, as shown in Table 10.

Scenario 3: Present situation with Nacala line rebuilt in 1986

This scenario is the most likely future now facing Malawi over the next 5 years. The result would be an increasing capacity of the Nacala Line and a gradual shift to more rail use over the period 1987-1989. This would have the effect of gradually reducing road traffic in this period despite the increase in total exports and imports.

The number of trucks that could be added to the Malawi fleet under this scenario varies from 67 to 80.

Scenario 4: Nacala Line and Tete Road closed due to increased conflict in Mozambique

This scenario represents the worst case for the country with a major impact on both the economy and on road transport. The total tonnage exported and imported would decline sharply, while road transport to Zambia and Tanzania would increase, since they would be the only routes available.

The maximum number of trucks that could be acquired by Malawi transporters in this case would range from 112 to 170.

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Considering all four scenarios shown in Tables 1 and 2 and the resulting demand for trucks in each case it appears that an AID level of 10 - 15 vehicles could be easily absorbed into the demand under even the worse case scenario for the truck industry (Scenario 3).

Demand projections under these scenarios are shown in the following tables, and are indicated graphically in Figure 1.

Table 9 shows the percentages of total imports and exports which will be carried by road under the different scenarios during the period 1985-89. Under Scenario 1 there is gradual growth in road traffic and in Scenario 4, when both rail lines are considered effectively closed, there is more dramatic growth. Under the other two scenarios the overall percentage of goods carried by road declines.

Table 10 converts the total tonnage into number of vehicle trips assuming 40 tonnes of fuel per tanker and 27 tonnes of dry imports/exports per truck with 70% of vehicles loaded. Assuming each truck undertakes on average 4.5 trips per month this gives the total number of trucks required to transport this tonnage. Under Scenarios 1,2 and 3, assuming that Malawian road hauliers will undertake 30% of the trips, this shows the total demand for Malawian registered trucks to operate on internatinal haulage routes. Under Scenario 4 it is assumed that the total volume of external trade would be reduced (demand factor 80%) and that Malawian registered trucks would carry 40% of the total volume.

Considering that Malawi has an existing fleet of about 30-40 trucks for international transport, this analysis shows the demand for the following additional number of Malawian registered trucks:

Under Scenario 1	:	120 - 140 (increasing)
Under Scenario 2	:	120 - 60 (declining)
Under Scenario 3	:	120 - 100 (declining)
Under Scenario 4	:	140 - 210 (increasing)

Hence under any of the above scenarios, it appears that the provision of an additional 10-15 tractor trailers could easily be absorbed by the demand.

TABLE 1

External Trade Potential by Road

Total Tonnage in 1985 (thousand tonnes)

Dry Exp	Dry Imp	Fuel Imp	Total
300	425	125	850

Percent of Exports/Imports Coming by Road					Tonnage by Road (thousand tonnes)			
Scenario 1 Status Quo								
Year	Dry Exp	Dry Imp	Fuel		Dry Exp	Dry Imp	Fuel	Total
1985	75	75	55		225	320	70	615
1986	75	75	55		230	325	80	635
1987	75	75	55		235	340	90	655
1988	75	75	55		240	340	100	680
1989	75	75	55		245	350	110	705
Scenario 2: Beira Line Reopened								
1985	75	75	55		225	320	70	615
1986	60	65	40		184	282	58	524
1987	50	55	30		157	242	49	448
1988	40	45	20		128	204	36	368
1989	30	35	10		98	163	20	281
Scenario 3: Nacala Line Rehabilitated								
1985	75	75	55		225	320	70	615
1986	75	75	55		230	325	80	635
1987	65	65	40		204	286	65	555
1988	60	60	35		192	272	64	528
1989	55	55	30		180	257	60	496
Scenario 4 : Mozambique Closed				Demand Factor				
1985	80	80	75	0.8	189	273	76	539
1986	100	100	100	0.75	230	325	109	664
1987	100	100	100	0.75	235	330	123	688
1988	100	100	100	0.8	256	363	145	764
1989	100	100	100	0.8	261	373	160	795

* A reduction in total export and import demand of 20-25% is expected under this scenario which implies major transport cost increases.

TABLE 2

Demand for Trucks

Year	Total Trips Trucks	Total Trips Tankers	All Trucks	Total Trucks Req	Potential % for Malawi	Potential Malawi Trucks
Scenario 1: Status Quo						
1985	18824	2800	21624	400	30	120
1986	19118	3200	22318	413	30	124
1987	19412	3600	23012	426	30	128
1988	20000	4000	24000	444	30	133
1989	20588	4400	24988	463	30	139
Scenario 2 : Beira Line Reopended						
1985	18824	2800	21624	400	30	120
1986	16569	2327	18896	350	30	105
1987	14235	1964	16199	300	30	90
1988	12000	1455	13455	250	30	75
1989	9608	800	10408	193	30	58
Scenario 3 : Nacala Line Rehabilitated						
1985	18824	2800	21624	400	30	120
1986	19118	3200	22318	413	30	124
1987	16824	2618	19442	360	30	108
1988	16000	2454	18545	343	30	103
1989	15098	2400	17498	324	30	97
Scenario 4 : Mozambique Closed						
1985	16063	3055	19117	354	40	142
1986	19118	4364	23481	435	40	174
1987	19412	4909	24321	450	40	180
1988	21333	5818	27152	503	40	201
1989	21961	6400	28361	525	40	210

Note: see text for assumptions.

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2. Financial Analysis of Private Trucking Operations

This section is devoted to demonstrating the various conditions under which Malawian units may operate on international routes and their consequent operating costs and cash flows. This shows the potential commercial viability of operating trucks internationally on one of Malawi's only two potential road routes.

A. For the purposes of illustration, a single tractor/trailer is assumed to be operating between Lilongwe and Lusaka. The following analysis, in Cases A and B, shows the difference between operating a large or smaller fleet of either 15 or 3 trucks respectively.

a) Turnaround

Recent experience has shown that it is possible to undertake five (5) round trips - Lilongwe-Lusaka-Lilongwe per month. This assumption is used in the analysis.

b) Loading

It is assumed that loads are available in both directions and that consequently the trailer is always fully loaded. An average load of 28 tonnes is assumed in both directions.

c) Rates

The rates assumed are the most commonly quoted by MITCO per trip where backhauls are guaranteed. This amounts to about K4,000 per round trip of approximately 1,500 kms for 28 tonnes, that is about K70-75 per tonne in each direction.

d) Hire purchase of rig

The analysis is based on the May 1984 selling price ex-MALTRACO of a Mack 686 with semi-trailer which is:

Mack 686 Horse	K 155,000
Trailer	K 45,000
	K 200,000

Payment Terms: Under hire purchase agreements, the following payment terms are available: 20% downpayment on tractor and trailer, with 48 months to repay loan.

20% Deposit on tractor and trailer	K 40,000
Balance	K 160,000

This is to be repaid monthly inclusive of prevailing 15% per annum interest on the balance, as follows:

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	Period	Monthly	Total Year 1	Annual Total Years 2-4
Tractor and Trailer	48 mths	K 4,453	K 53,435	K 53,435
Deposit			K 40,000	
Total Annual Payments			K 93,435	K 53.435

e) Running Costs

FUEL - Fuel consumption is 1 liter/mile or 0.6 liter/km. The May 1984 price of diesel in Malawi was K0.95/liter and approximately the same in Zambia. Account is taken of extra non-earning kilometerage of approximately 5% of total kilometers over and above the 1500 km.
(Note: Fuel prices in Zimbabwe and the R.S.A. are lower than in Malawi).

PREVENTIVE MAINTENANCE - If a maintenance contract is entered into this is allowed at MALTRACO's current rates of approximately K4,500 per annum. (This includes oil changes).

REPAIRS - General experience has been used assuming 50% of annual depreciation for repair costs. This may include a major engine overhaul in the fourth year.

TYRES - One complete tyre change every 35,000 kms has been allowed on the advise of operators on the route. This high allowance comes from the condition of the road, which is causing major tyre failures. New tyre prices are incorporated (approximately K750 for one tyre and tube) and the benefits to be derived from retreading are ignored.

INSURANCE - Insurance costs are at prevailing rates of approximately K20,000 or 10% per annum of vehicle value.

INFLATION - Both costs and income have been computed in constant Kwacha (1984).

LIFE - Expected vehicle life of 6 years has been assumed for the tractor and 10 years for the trailer.

f) Other Costs

FEES - There are certain fees charged to the transporter for carrying cargo under bond internationally. On the selected route these are:

Agency fees in/out of Malawi	K280
Agency fees in/out of Zambia	K280
Toll tax in/out of Zambia	K200
plus drivers allowance, say	K 40
Total	K800/trip or K4000 per month for 5 trips per month

Some of these fees may or may not be passed on to the customer. It has been assumed that 50% of these fees will be passed on.

ROPES AND TARPAULINS - Each semi trailer requires two tarpaulins (K600 each) and rope (K100) which lasts about one year - total annual cost K1300.

g) Wages

The following represents typical monthly payroll costs for an establishment:

Small Haulier (3 trucks)

Owner	K2500
Labor	K 400
Accountancy	K 250
Drivers (3)	K 450
	K3600
or	K1200/unit/month

Medium Haulier (15 trucks)

Manager	K 3500
Workshop Foreman	K 3000
Bookkeeper	K 1500
Yard Foreman	K 200
Mechanical Assistants (6)	K 900
Loaders	K 900
Messenger/Clerk	K 200
Drivers (15)	K 2250
Accountancy	K 250
	K12950

or K863/unit/month
or K10360/unit/year

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h) Fixed Overheads

The following represents the fixed overheads for a medium size business (15 trucks):

Leased property	K 48,000/year		Rent = K 48,000 pa
Office fixtures & fittings	K 10,000	Life 10 years	Dep. = K 1,000 pa
Forklift truck	K 60,000	Life 5 years	Depr = K 12,000 pa
Company Car	K 15,000	Life 5 years	Depr = K 3,000 pa
Company Van	K 15,000	Life 5 years	Depr = K 3,000 pa
Motorcycle (deliveries)	K 3,000	Life 5 years	Depr = K 600 pa
Workshop tools & equipment	K 20,000	Life 10 years	Depr = K 2,000 pa
Vehicle operating costs			K 9,600 pa
		Total	K 79,200

or K5,280/unit/year

For a small business of only 3 trucks, most of the above may be avoided assuming maintenance is undertaken professionally or under contract. The only cost retained then will be that of owning and operating a company van for support, that is, depreciation plus operating costs, representing approximately K4,200 per annum.

B. Analysis

The following Tables 11 and 12 show the projected cash flow (in 1984 constant Kwacha) for one truck operating continuously on the Lilongwe-Lusaka route. The first case represents a medium size road haulier having 15 trucks whilst the second case represents an operator with only 3 trucks. It is assumed that the truck is fully loaded in both directions and undertakes 5 round trips per month. Annual expenses and revenues are shown over a period of 6 years.

It should be noted that most equipment is depreciated over 5 years. In the case of trailers, workshop tools and equipment, and office furniture a life of 10 years is assumed. Hence a residual value at the end of six years is assumed equal to 40% of the value of this equipment (35000 + 20000 + 10000) 0.4 = K26,000. This will not contribute to the truckers surplus but it should be considered as part of the analysis.

In Case A the tractor-trailer combination is obtained through a hire purchase agreement, with 20% downpayment and 4 years to repay. Similarly for Case B1. However in Case B1 the operator has a deficit for the first four years under this financing arrangement. A preferred method is therefore leasing which is shown in Case B2. Whilst annual payments are higher (and larger overall) this improves the cash flow situation in the first few years enabling a smaller but consistent surplus to be generated from year 1. Maintenance costs may also be slightly reduced if a full preventive maintenance contract is entered into with the supplier.

The analysis indicates that recurrent costs of fuel and tyres are the most significant for continuous operations. The type of financing package is also critical with regard to cash flow. The results from analysis of Case A show that whilst in the first two years some working capital is required to finance the deficit, in the following two years sufficient surplus is earned to cover this deficit. A further surplus is also earned in the last two years.

In Case B1, the financing arrangements result in a cumulative deficit for the first four years. This would not be suitable for an owner operator. Case B2 therefore outlines a suitable leasing arrangement which would allow the owner to generate a small constant annual surplus.

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TABLE 3

GENERAL CARGO BOTH WAYS - LILONGWE/LUSAKA

e A - Medium size firm
trucks)

	Y1	Y2	Y3	Y4	Y5	Y6	TOTAL
quency - 5 trips per month							
ual Kilometers 94500 km							
ed Costs	5280	5280	5280	5280	5280	5280	31680
ning Costs - Fuel	54580	54580	54580	54580	54580	54580	327480
- Repairs	16000	16000	16000	16000	16000	16000	96000
- Tires	42990	42990	42990	42990	42990	42990	257940
- Insurance	20000	20000	20000	20000	20000	20000	120000
- Wages/Travel Allowances	10360	10360	10360	10360	10360	10360	62160
- Tarpaulin etc.	1300	1300	1300	1300	1300	1300	7800
- Fees	24000	24000	24000	24000	24000	24000	144000
Purchase Cost	53430	53430	53430	53430			213720
sit	40000						40000
l Cash Outflow	267940	227940	227940	227940	174510	174510	1300780
dual Value						26000	26000
ne (Rate = K145/tonne)	243600	243600	243600	243600	243600	243600	1461000
al Surplus (Deficit)	-24340	15660	15660	15660	69090	95090	186220
ative Surplus (Deficit)	-24340	-8680	6980	22640	91730	186220	186220

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TABLE 4

GENERAL CARGO BOTH WAYS - LILONGWE/LUSAKA

:se B1 Small Firm (3 trucks)

	Y1	Y2	Y3	Y4	Y5	Y6	TOTAL
:equency - 5 trips per month :nual Kilometers 94500 km							
xed Costs	1400	1400	1400	1400	1400	1400	8400
nning Costs - Fuel	54580	54580	54580	54580	54580	54580	327480
- Repairs*	23400	23400	23400	23400	23400	23400	140400
- Tires	42990	42990	42990	42990	42990	42990	257940
- Insurance	20000	20000	20000	20000	20000	20000	120000
- Wages/Travel Allowances	14400	14400	14400	14400	14400	14400	86400
- Tarpaulin	1300	1300	1300	1300	1300	1300	7800
- Fees	24000	24000	24000	24000	24000	24000	144000
re Purchase Cost	53430	53430	53430	53430			213720
posit	40000						40000
tal Cash Outflow	275500	235500	235500	235500	182070	182070	1346140
sidual Value						14000	14000
come (Rate = K145/tonne)	243600	243600	243600	243600	243600	243600	1461600
nual Surplus (Deficit)	-31900	8100	8100	8100	61530	75530	129460
mulative Surplus (Deficit)	-31900	-23800	-15700	-7600	53930	129460	129460

se B2

asing Cost	-57090	-57090	-57090	-57090	-57090	-57090	-342540
nual Expenses	-178670	-178670	-178670	-178670	-178670	-178670	-1072020
come	243600	243600	243600	243600	243600	243600	1461600
ual Surplus (Deficit)	7840	7840	7840	7840	7840	7840	47040
ulative Surplus	7840	15680	23520	31360	39200	47040	47040

5% of Annual Depreciation

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3. Cost Benefit Analysis of Project

The analysis of the project is undertaken by considering the costs and benefits of different project outputs (as shown by 1984 constant US Dollars) over a period of ten years.

A. Costs

The costs are detailed under the following headings:

Industry Training

The training costs are spread over each year of the project. This shows the cost of training contracts with DEMATT, the Polytechnic and umbrella organizations, and training support.

Costs financed from the local currency fund grow then decline and are gradually supplemented by funds from the Government of Malawi and user fees.

The major equipment procurement costs are shown in year 1. In future years there are continued recurrent costs for miscellaneous supplies. The costs of training via technical assistants are shown during the first three years. The Government of Malawi contributions are shown as proividing an increasing share. Total costs for the whole component of training for the trucking industry stabilize at a constant level.

Credit for Heavy Vehicles

The USAID contribution for equipment is represented by the cost of administering the loan for the vehicles. Assuming one quarter of the $2.5 million is paid back every year, 7% of the outstanding loan is retained as a fee. This declines as the outstanding loan declines.

The recurrent annual GOM contribution is also shown which relates to a $2.1 million loan expected to be provided by EXIMBANK financing and West German Government assistance (4.3 DM). This declines to zero after four years since there is no revolving loan committment. Overall credit costs decline over a ten year period.

Improved MOTC Planning and Operations

The principal technical assistance costs are shown for the first three years. Equipment costs are also shown. This includes the cost of vehicle inspection equipment, support vehicles for the MOTC and computer facilities. Recurrent costs for maintenance of equipment provided to the MOTC are also shown, gradually increasing.

All of the above costs are shown in Table 13. Reference should also be made to Table 3 of Section II (Cost estimate and financial plan) giving projected local currency fund use.

B. Benefits

Benefits are also quantified under similar headings:

1. Industry Training

The training program as designed aims to provide training in several different areas of expertise specifically focused on particular needs for personnel in the trucking industry.

Training courses and seminars are to be developed in the following areas:

- fleet management
- financial management
- operational planning and international transit procedures
- driving techniques
- terminal operations
- equipment maintenance etc.

There are many benefits associated with each of these courses, some of which are easily quantifiable, others of which are better stated qualitatively. Several of these benefits can be achieved with regard to the vehicle itself, through better maintenance and driving techniques for example, both of which lead to a) reduced vehicle operating costs, b) extended vehicle lives and c) improved availability.

These are the most significant of the quantifiable impacts. Therefore they are used below as the basis for the benefits of the industry training program.

For the purposes of analysis, the expected build up of the heavy vehicle equipment fleet and the number of trucks/owner operators expected to be trained under the proposed program is given below:

Year	1	2	3	4	5	6	7	8	9
Number of new tractor-trailers	25(a)	2(b)	2	1	-	-	-	-	-
Number of truckers trained	4	10	16	20(c)	22	24	26	28	30

These numbers are used to calculate the expected benefit of the project.

Note:

(a) Approximately 10-15 via USAID, remainder from Federal Republic of Germany and EXIMBANK financing

(b) Other vehicles funded via the revolving fund

(c) Increasing at 10% per annum after year 4.

Details of calculations showing the breakdown of expected benefits from training in the industry are given below. These calculations are made for economic benefits excluding taxes and adding shadow costs for foreign exchange. Increases in Malawi net national income is the focus.

a) Reduced vehicle operating costs

i) Fuel: typical consumption 0.60 liters/km. With 5% decrease due to improved driving techniques and maintenance, consumption is 0.57 liters/km a reduction of 0.03 liters/km. With economic fuel cost K0.6/liter, kilometerage approximately 100,000 km. Potential savings = 0.03 x 0.6 x 100,000 = K1800 or approximately $1375 per annum per truck.

ii) Tyres: typical utilization - complete change every 30,000 km. With 10% increase in life due to improved driving techniques life is 33,330 km. Tractor and trailer have 22 tyres/tubes. Therefore use 3 sets for 100,000 km annually; tyre plus tube: (K550 each economic cost). Potential savings = 0.1 x 22 x 3 x 550 = K3630 or approximately $2800 per annum per truck.

iii) Repairs: average annual cost is considered as 75% of annual depreciation or an economic cost of K20,000 per annum. Assuming reduction to 60% of annual depreciation with improved preventive maintenance, this is K16,000 per annum. Potential savings = K4000 or approximately $3075 per annum per truck.

It is assumed that the above benefits will be attained by those initial owner-operators and truckers who have received training/instruction in several disciplines from the program (one truck per owner operator). Hence total annual benefits of $7250 per truck are applied to the appropriate number of trained owner-operators which grows over the period, to give total benefits resulting from reduced vehicle operating costs over the 10 year period (see Table 14).

b) Extended vehicle lives

Whilst some transporters obtain longer lives, present average life for a tractor is about 5 years. With improved operations and maintenance through training, life may be extended to 6 years. Hence a Malawian truck may become available for an additional 12 months, undertaking on average 5 round trips per month. This extended life will

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generate foreign exchange savings by replacing a certain number of additional trips that would otherwise be undertaken by a foreign road hauler, and will result in reduced depreciation costs and will also contribute to increased national income.

Total annual savings can be considered as foreign exchange savings in operations (40% of vehicle operating expenses multiplied by the shadow price of foreign exchange) plus savings in annual depreciation (15% of annual operating expenses) plus benefits from the added contribution (40%) to the net increase in national income. Therefore due to one year of extended life, imputed savings per truck are estimated to be approximately 55% of total annual revenue or 0.55 x 2436000 / 1.3 = $103,000 per truck.

These benefits only occur after the first five years of life of the tractors has been obtained. Hence in years 6, 7, 8, 9 and 10 benefits have been calculated for an extra year's life achieved from the additional number of 4, 6, 6, 4 and 2 trucks respectively, due to the newly trained truckers achieving longer lives of their vehicles (see Table 14).

c) Improved vehicle availability

As a result of the training programs, improved routine and preventive maintenance is expected to lead to improved vehicle availability. In association with better overall fleet management, terminal operations and higher level planning, it is expected that turnaround times will improve, border crossings will be quicker, resulting in an overall improvement in vehicle availability. This can be translated into an increasing frequency of trips, for example rising from 5 to 6 round trips per month. This will have two significant impacts:

- replacing foreign road haulers by Malawian transporters.
- carrying additional commodities, either by reducing wastage due to inability to provide transport services for an export crop, or by increasing the volume of imports, or agricultural inputs, leading to increased future agricultural production.

The former impacts result in foreign exchange savings of approximately 40% of annual revenue. The latter results in a net increase in national income of about K112.5 per ton (86 dollars/ton) based on for example additional export maize (value approximately K250/tonne) and additional imported fertilizer (value approximately K200/tonne). The latter will more than contribute to the production of 1kg of maize per kilogram of fertilizer. Assuming an average worth of K225/tonne per commodity transported, one additional trip per month implies an additional 300 tonnes per annum can be transported per truck in both directions. Also assuming an incremental net benefit of approximately one half of the total value or K112.5 per tonne ($86/tonne), one truck can generate net economic benefits of approximately $52,000 per annum.

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Therefore by applying this net benefit to the series of owner-operator truckers trained in years 1, 2, 3 etc. whom are able to achieve this higher level of vehicle availability, the total benefits from this source are quantified (see Table 14).

This is conservative since much higher value commodities may be transported (e.g., tea and tobacco).

2 Credit for Heavy Vehicles

Through the provision of heavy trucking equipment, there are extensive benefits to be generated. Currently imports and exports are carried by both Malawian and by foreign transporters. Where there is a shortfall in the Malawian fleet this is made up by contracting with foreign haulers. Therefore the impact of providing an additional 10-15 tractor-trailer combinations is twofold. Firstly, there are foreign exchange savings generated through the transport of commodities being undertaken by Malawian transporters. Secondly, there will be an increase in net national income due to the greater availability of new vehicles in Malawi.

This situation is therefore similar to that already outlined for improving the availability of the existing fleet. However in this case it results from the provision of new vehicles. Hence taking this increased supply into consideration, the benefits from transporting additional commodities can be quantified. The incremental net benefits are the same; (86 dollars per ton) and net benefits of $5,2000 per annum per truck are generated. By applying this to 60% of the number of new trucks (15 trucks), increasing at the rate of one unit per annum. This gives a stream of potential benefits for 15, 16, 17, 18, 19 and 20 trucks generated in the years 2, 3, 4, 5, 6 and 7 respectively (see Table 14).

3 Improved MOTC Planning and Operations

The technical assistants will play a critical role in the project, as advisors to the Ministry of Transport and Communications and the Road Traffic Commissioner. Their principal aim is to assist in overcoming many of the institutional and organizational problems which exist in the transport sector, due to the landlocked position of Malawi.

In this respect it has been recognized that the MOTC must take an active role in setting and adopting policies such that all modes of transport are effectively utilized and at the least cost to the national economy. To this end, it is envisaged that the technical assistants will actively participate by:

assisting in negotiating bilateral agreements with neighboring countries with a view to establishing acceptable transit rights and reciprocal transit transport agreements;

assisting in developing freight sharing agreements so as to balance the movements of external trade and to facilitate obtaining road service permits etc.; and,

promoting the Malawian private road transport sector through appropriate supportive actions in the public sector.

Likewise as with the training components, there are many outcomes from technical assistance which will result in significant impacts in terms of benefits to the Malawi economy, some of which are not readily quantifiable. Some of these activities also are complementary to those of MITCO whom will endeavor to assist to balance loads, optimize road haulage capacity and obtain haulage contracts for Malawian truckers. In the long run MITCO will have a broader influence and may begin to negotiate down actual cargo rates (by road or rail) and other cost items (for example cargo agency fees, insurance rates etc.) which are of particular significance to Malawian truckers.

In terms of quantifiable benefits, no attempt is made to quantify several of the more intangible benefits. Rather, attention is focused on one particular item upon which it has been shown possible to make some impact, that is, bonding fees, which currently must be paid to agents when goods are in transit in a country.

Currently fees of K5 per ton are charged by agents. Due to anticipated reductions in the time and cost of border formalities, aided by MITCO pressure to reduce transit costs, a 30 percent reduction is forecast, of which one half (K0.75 or 0.58 dollar per ton) is attributable to this project.

In the preceding section a series of demand scenarios for truck traffic was determined. Using Scenario 3 as the most probable option (continuation of existing situation) and assuming that the projected tonnages would be carried by road (remaining constant after year 6), the potential savings in negotiating down agency fees have been estimated over the next ten year period, the full impact being felt in year 4, with 50% and 75% of potential reductions being acheived in years 2 and 3 respectively (see Table 14).

C. Results

The series of project costs over the ten year period is shown in Table 13. This includes both USAID and the Government of Malawi contributions for industry training, credit for the purchase of tractors and trailers, and the cost of improving the Ministry of Transport and Communications planning procedures and operations. Total economic costs average $1 million per annum in the first three years and approximately $0.3 million per annum in remaining years, totalling about $5 million in constant dollars.

The economic benefits from the project as descibed in the previous section are summarized in Table 14. This shows generally increasing economic benefits over the life of the project with benefits increasing to $2.5 million per annum during the first five years and averaging just over $3 million annually thereafter.

The internal rate of return of the project (IRR) is 103% and the economic benefit/cost ratio (B/C) is 11.8 (using 10% discount rate) or B/C = 9.3 (using 15% discount rate). This high rate of return and economic benefit/cost ratio is expected of a project of this nature. However quantifiable economic benefits have been estimated conservatively and it should be expected that the real rate of return will be even higher when taking into account the considerable multiplier and other qualitative economic benefits from the project.

TABLE 5

PROJECT COSTS
(thousand US Dollars)

	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10
1. Industry Training										
- training contract	67.7	60.4	78.3	80.0	90.0	100.0	90.0	90.0	72.0	30.0
- equipment	172.1	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
- technical assistance	205.0	205.0	160.0							
- GOM staff & facilities	100.0	100.0	100.0	100.0	100.0	100.0	120.0	120.0	138.0	180.0
Sub-Total	544.8	375.4	348.3	190.0	200.0	210.0	220.0	220.0	220.0	220.0
2. Credit for heavy vehicles										
- AID	175.0	155.0	130.0	115.0	90.0	70.0	55.0	40.0	25.0	10.0
- GOM	147.0	110.0	56.0	28.0						
Sub-Total	322.0	265.0	186.0	143.0	90.0	70.0	55.0	40.0	25.0	10.0
3. Improved MOTC Planning & Operations										
- technical assistance	165.0	285.0	285.0							
- equipment	145.0	15.0	15.0	16.0	16.0	17.0	17.0	18.0	18.0	20.0
- GOM	110.	110.	110.							
Sub-Total	420.0	410.0	410.0	16.0	16.0	17.0	17.0	18.0	18.0	20.0
TOTAL	1286.8	1050.4	944.3	349.0	306.0	297.0	292.0	278.0	263.0	250.0

TABLE 6

PROJECT BENEFITS
(thousand US Dollars)

	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10
dustry Training										
Reduced vehicle operating costs	29.0	72.5	116.0	145.0	159.5	174.0	188.5	203.0	217.5	239.2
Extended vehicle lives	-	-	-	-	-	412.0	618.0	618.0	412.0	206.0
Improved vehicle availability	208.0	520.0	832.0	1040.0	114.0	1248.0	1352.0	1456.0	1560.0	1716.0
avy vehicle availability	-	780.0	832.0	884.0	936.0	988.0	1040.0	988.0	936.0	844.0
proved MOTC Planning Operations										
duced transit fees	-	172.4	274.8	320.2	304.6	286.2	286.2	286.2	286.2	286.2
al Benefits	237.0	1549.9	2054.8	2389.2	2544.1	3108.2	3484.7	3551.2	3411.7	3331.4
al Costs (e Table 13)	-1286.8	-1050.4	-944.3	-349.0	-306.0	-297.0	-292.0	-278.0	-263.0	-250.0
h Flow	-1049.8	494.5	1110.5	2040.2	2238.1	2811.2	3192.7	3273.2	3148.7	3081.4

103%
11.8 @ 10%
9.3 @ 15%

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ANNEX F9

INITIAL ENVIRONMENTAL EXAMINATION

Project Location:	Malawi
Project Title:	Malawi Commercial Transport
Number:	612-0218
Funding:	DA Grant
AID:	$5,000.00
GOM:	$2,000.00
Life of Project:	Four (4) years from signing of Project Grant Agreement
IEE Prepared by:	Domenick J. Scarfo, Project Officer, REDSO/ESA
Environmental Action Recommended:	Negative Determination

Concurrence:

Sheldon W. Cole
AID Representative
USAID/Malawi

Date:

Assistant Administrator's Decision:

Approved: _____

Disapproved: _____

Date: _____

Clearances:

REDSO/ESA, Environment Officer _____ date Jan 19, 1984

REDSO/ESA, Regional Legal Officer _____ date Jan 19, 1984

RECOMMENDED ENVIRONMENTAL THRESHOLD DECISION

The only segment of the proposed project which could have any effect on the environment is that dealing with the procurement of transport equipment: approximately ten (10) 250-300hp twin axle tractors, ten (10) 42 feet tri-axle semi trailers, (which a 28 ton total capacity) and spare parts. Remaining segments of the proposal consist of technical assistance and training. The technical assistance and training segments of this project normally qualify for a Categorical Exemption under A.I.D. Regulation 16 (Section 216.2 (c)(2)(i)).

The transport equipment to be procured under this project is not additive, in the sense that if these tractors and trailers are not used, then foreign haulers will be used for Malawi's external trade. Because the equipment to be procured by AI.D. will be new, it is likely that these vehicles will emit less polution than older vehicles operating from foreign sources.

On the basis of the above, USAID/Malawi recommends that a Negative Determination be granted. The REDSO/ESA Environmental Officer and Regional Legal Advisor fully endorse USAID/Malawi's recommendation for a Negative Determination (See Annex E for IEE).

IMPACT IDENTIFICATION AND EVALUATION FORM

Impact Areas and Sub-areas	Impact Identification and Evaluation
A. LAND USE	
1. Changing the character of the land through:	
a. Increasing the population	N
b. Extracting natural resources	N
c. Land clearing	N
d. Changing soil character	N
2. Altering natural defenses	N
3. Foreclosing important uses	N
4. Jeopardizing man or his works	N
5. Traffic access	N
6. Land use planning	N
7. Squatter, other development	N
B. WATER QUALITY	
1. Physical state of water	N
2. Chemical and biological states	N
3. Ecological balance	N
C. ATMOSPHERIC	
1. Air additives	L
2. Air pollution	L
3. Noise pollution	L

D. NATURAL RESOURCES

1. Diversion, altered use of water _____ N
2. Irreversible, inefficient commitments _____ N
3. Wildlife _____ N

E. CULTURAL

1. Altering physical symbols _____ N
2. Dilution of cultural traditions _____ N

F. SOCIOECONOMIC

1. Changes in economic/employment patterns _____ L
2. Changes in population _____ N
3. Changes in cultural patterns _____ N
4. Dislocation and relocation of area residents _____ N
5. Support facilities _____ N

G. HEALTH

1. Changing a natural environment _____ N
2. Eliminating an ecosystem element _____ N
3. New pathways for disease vectors _____ N
4. Safety provisions _____ N

Environmental determination

Since the project consists of principally training and technical assistance and the provision of 10-15 heavy vehicles, only the latter can be considered as having any potential environmental impact.

No impact is expected on the following component areas:

- land use
- natural resources
- water quality
- cultural impacts
- socioconomic impacts
- health impacts

The principal impact that will occur is likely to relate to the atmosphere. Some air additives will result and a certain amount of air and noise pollution will be created through the use of the trucks.

However the trucks to be provided will replace existing trucks. Presently these trucks (either Malawian or foreign), sometimes trucks with draw-bar trailers, are old, overloaded, inefficient. They will be replaced by more powerful articulated rigs, capable of carrying larger loads more economically, with more efficient engines creating less pollutants. To the extent then that the newer trucks replace existing trucks, atmospheric pollution will be marginally reduced.

However, as a result of the whole program, training and technical assistance included, it is expected that a higher level of availability will be achieved and hence a higher level of utilization of the trucks. This will result in more trips and hence a marginal increase in the extent of pollutants created.

On balance it is considered that these impacts will be small and that overall, a negative determination should be granted for the project.

ANNEX F10

ENERGY ANALYSIS

The energy effects of the proposed project in Malawi will be small but probably positive. The training and provision of credit will both contribute to the use of more efficient vehicles for international trucking services. This should save 10-15% of the energy per ton hauled and therefore less diesel fuel will be used. This saving would be 150,000 to 200,000 liters per year. Since Malawian truckers would be assuming a larger share of international trucking, this may increase the purchase of diesel fuel in Malawi. However, the price of fuel is less in Zimbabwe and a well managed firm would buy as much Zimbabwe fuel as possible, whether or not it is based in Malawi. The net effect on Malawi fuel consumption will probably be very small.

ANNEX F11

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ANNEX F12

LIST OF CONTACTS

BY THE PP DESIGN TEAM

Design Team Members:

Murl Baker	Project Officer, USAID/Malawi
Peter Cook	Project Design Officer, Louis Berger International
Dr Phillip Moeller	Development/Training Specialist, Louis Berger Int.
Nigel Lewis	Transport Economist, Louis Berger International
Thomas Kaunda	Senior Transport Officer (Planning), MOTC
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Mr. Chris Parker	Sales Manager MALTRACO
Mr. C.H. Von Ribbeck	Managing Director Automotive Products
Mr. Eric Jones	General Manager MALTRUCK International
Mr. K. Chirwa	Training Specialist Press Transport
Mr. G. Khongono	Road Traffic Commissioner Road Traffic Commission, MOTC
Mr. G. Treumper	Commercial and Consular Attache German Embassy
Mr. J. Thompson	General Manager INDEBANK
Mr. C. Chilingulo	Legal Officer INDEBANK
Mr. J. Tennett	J. Tennett and Sons
Mr. Nzoni	Private Owner/Operator
Mr. Amosi	Amosi Transport
Mr. M. Thomas	General Manager Coley Hall
Mr. J. Ticton	General Manager MITCO

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Mr. G.J. Honde	Manpower Officer Department of Personne, Management & Training Office of the President and Cabinet

ANNEX F-13

WAIVERS

ACTION MEMORANDUM FOR THE ASSISTANT ADMINISTRATOR FOR AFRICA

FROM: Project Paper Review Committee

SUBJECT: Request for Sole Source Procurement Waiver

PROBEM: Your authorization is required to approve a sole source procurement waiver for the purchase of two Burroughs B20 series computers valued at approximately $30,000, including software and peripherals.

A.	Cooperating Country:	Malawi
B.	Authorizing Document:	Project Paper
C.	Project:	Commercial Transport
D.	Nature of Funding:	Grant
E.	Description of Goods:	Burroughs Series B20 Computer, Software and Peripherals
F.	Approximate Value:	$30,000
G.	Source and Origin:	United States
H.	Supplier:	BURCO Electronic Systems Ltd. Ginnery Corner, Kamuzu Highway Box 934, Blantyre Malawi

DISCUSSION:

In order to address the principle Project objectives of improving communications between the Government and the private sector transporters and of achieving greater cooperation in resolving the nation's transport problems, the national transport committee (MOTC) urgently needs to be able to monitor and coordinate international trade flows and to resolve transport bottlenecks as they arise. Much of the MOTC's ability to achieve these objectives will depend upon the availability of computerized processing equipment. Only with the addition of Micro Processing Equipment can the MOTC realistically expect to capably analyze the costs of different freight rates and transportation modes, and to adequately collect and assimilate transportation data for planning and regulating the flow of traded commodities over the various international routes. USAID and MOTC have therefore determined that a micro computer system is the most appropriate method of linking the two sectors and promoting coordination efforts.

In previous years the GOM's policy regarding the acquisition of computer equipment has been to limit equipment purchases to a single brand. A standardization program was introduced, and today the GOM has standardized upon the Burroughs B20 series of micro computers.

Already the MOTC has existing data management programming designed and written for the Burroughs B20 and B25 series. As a result of this programming work BURCO Electronic Systems Limited, the sole supplier of Burroughs computers in Malawi, is familiar with MOTC's needs and applications.

Several discussions with BURCO were held during Project design, centering on the minimum cost-effective equipment configuration which could adequately meet the needs of the Project. The PP Design Team feels that the proposed micro system meets the criteria set forth in the Project.

BURCO is prepared to undertake the installation and maintenance of the proposed network provided that the equipment conforms to equipment and programming already used by the MOTC. A waiver of competition and negotiation with a single source is considered justified in accordance with AID Handbook 11, Chapter 3, Section 2.2.5b since operational and standardization requirements laid down by the Malawian Government and the MOTC limit availability of the desired equipment to only one source. That source is BURCO Electronic Systems Limited which is the authorized distributor for this region of U.S.-manufactured Burroughs equipment.

JUSTIFICATION: The justification for this waiver is that the micro processing equipment required in the Commercial Transport Project is only available from a single source, having the capability of both installation and maintenance of this U.S.-manufactured equipment as the Burrough authorized representative. This justification conforms to AID Handbook 15, Chapter 3, Section 2.2.5b, which states that sole source procurement is justified if there is but one U.S. manufacturer or supplier of the required equipment.

AUTHORITY:

AID Handbook 1, Supplement B, Section 12C 4a (1) sets forth your authority to waive competition in the procurement of goods and services and to permit negotiation with a single source when the value of the procurement does not exceed $500,000.

RECOMMENDATION: For the above reasons and under the authority granted to you it is recommended that you approve this wavier of competition and authorize negotiation with a single source to permit purchase of micro processing computer equipment from the sole supplier, BURCO Electronic Systems Ltd.

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SPECIAL ACCOUNT

Financing Mechanisms

The financing of heavy transport vehicles will be undertaken through the provision of grant funds from USAID to the Government of Malawi (Treasury) who will them lend the funds to INDEBANK at a specified interest rate. INDEBANK will then relend the funds to individual transport operators who have been screened by the bank, MOTC and USAID. INDEBANK will charge a commercial interest rate, with the spread allowing for project administrationand risk coverage.

Loan repayments from individual transport operators will be paid into a Special Account which will act as basis for accumulatively local currency funds. These funds will then be available for disbursment to support other project related activities.

Disbursment Procedures and Uses

Disbursments will only be undertaken upon approval by MOTC and USAID. After the first year when repayments have begun to accumulate, and disbursment schedule will be prepared at the beginning of each year by the Ministry of Finance and submitted to MOTC and USAID for approval. Disbursments will be considered according to priority for:

- project local currency expenses such as training and support and training materials;
- maintenance costs of project supplied non-capital equipment;
- revolving loan funds for additional trucks as needed; and,
- other approriate uses for supporting Malawian aspects of the international trucking industry.

An outline of projected local currency fund uses is given in Table of Section II - Cost estimate and financial plan.

Special Conditions

As part of the conditions precedent to the project, prior to the provision of any funds to the GOM for the purchase of heavy transport vehicles, an executed loan agreement between GOM and INDEBANK governing the uses and repayment of funds shall be enacted. In addition details of the establishment of the Special Account, including procedures for both the accumulation and the disbursment of funds, shall be clearly identified and approved by USAID outlining the management, use and monitoring of these funds. All disbursments shall be for project activities