

PD ABU-074

**PRELIMINARY REPORT OF
CONSULTANCY RESULTS
ON ETHIOPIA REVOLVING
DRUG FUND STUDY**

Addis Ababa, Ethiopia

September 25-October 11, 1998

Jim Bates

BASICS Technical Directive: 020 ET 02 043
USAID Contract Number: HRN-Q-20-93-00032-00

A

TABLE OF CONTENTS

ACRONYMS

I.	BACKGROUND	1
II.	TRIP ACTIVITIES	1
III.	RESULTS AND CONCLUSIONS	2

APPENDIXES

APPENDIX A:	Summary of Study Objectives, Indicators, Data Sources, and Data Collection Instruments
APPENDIX B:	Summary of Sample Design
APPENDIX C:	Questionnaires and Data Collection Forms
APPENDIX D:	Illustrative Revised Workplan

ACRONYMS

ARI	Acute Respiratory Infection
BASICS	Basic Support for Institutionalizing Child Survival
EDL	Essential Drug List
IDA	International Development Association
MSH	Management Sciences for Health
MOH	Ministry of Health
NGO	Non-governmental Organization
RDF	Revolving Drug Fund
SNNPR	Southern Nations and Nationalities People's Region
USAID	United States Agency of International Development

I. BACKGROUND

Upon arrival in Addis Ababa, I was briefed on the purpose and background of the Revolving Drug Fund (RDF) Study by BASICS Health Financing Advisor Logan Brenzel. The first order of business was to review the *Proposal* and *Inception Report* prepared by the local group engaged to carry out the study, Berhanu Associates. The *Inception Report*, which Berhanu Associates formally presented to BASICS and MOH staff on September 28, contains the study objectives, sample design, and data collection instruments, as proposed by Berhanu Associates. The work plan, on which the budget is based, is contained in their proposal.

Following review of the report and having taken in Berhanu's presentation, my impression was that the local group had a good general understanding of the technical criteria to be used in evaluating the RDFs now operating in Ethiopia. (There are at least four types.) Still, neither from their documents nor their presentation did the following points emerge with clarity sufficient for assuring satisfactory results:

- Statement of study objectives
- Specification of primary and secondary indicators required for achieving the objectives
- Linkage between the indicators and the data to be collected for deriving them
- A data collection strategy and set of forms that will efficiently produce the minimum set of data required

Nevertheless, the work completed was relevant and provided an adequate platform for making the necessary clarifications.

II. TRIP ACTIVITIES

To remedy this situation and bring the missing clarity to the process, I worked closely with Berhanu Associates throughout my stay in Ethiopia to produce three main outputs. These included—

- A matrix summarizing the study objectives, indicators, data sources, and data collection forms, and showing the linkages between them. (Appendix A)
- Clarification of the samples of sites, indicator drugs, and prescribing encounters required for completing the study. (Appendix B)
- A set of questionnaires and data collection forms required for gathering the needed data. (Appendix C)

Through visits to four RDF sites in Addis Ababa, we were able to perform "reality checks" on the questionnaire and forms. What is meant by this is that we verified that most of the information called for by the instruments is probably available at most sites, most of the time.

III. RESULTS AND CONCLUSIONS

As noted, the outputs summarized above were developed collaboratively with Berhanu Associates, and in my opinion, they should be regarded as sufficient for dispersing payment for the deliverable "Submission of revised questionnaires and sampling plan," called for by October 8. It is important to note, however, that the forms still require field testing and possibly, further revision. This is understood by Berhanu Associates.

An important and unanticipated development emerged during our work together that needs to be commented upon. As the outputs summarized in paragraph three were prepared, discussed and revised, it became apparent that the study called for in the original BASICS scope of work is far more data intensive than Berhanu Associates had realized.

Simply put, there are required more indicators, more data for deriving them, more data collection instruments, more time at sites, better qualified data collectors, and more steps in the work plan than Berhanu Associates, and perhaps BASICS, had anticipated. For example, time and effort required for field testing and revising the data collection forms, training the data collectors, and data processing may not have been projected realistically. This has implications for both budget and work plan delivery dates. An illustrative list of steps for a revised work plan is attached as Appendix D.

I discussed this development with departing BASICS Chief of Party Dr. Vincent David and he suggested that, in light of all outputs now available and what is now more clear about the complexity of the study, Berhanu Associates review the work plan and budget and enter into discussion with BASICS concerning revisions that may be called for. It should be noted that it is not a certainty that more funding is required, although this may be justified following the review recommended by David. One alternative that may be considered is a reduction in the sample sizes, which might provide a satisfactory result within the limits of the existing funding agreement.

APPENDIXES

APPENDIX A

**SUMMARY OF STUDY OBJECTIVES, INDICATORS, DATA SOURCES,
AND DATA COLLECTION INSTRUMENTS**

Summary of Study Objectives, Indicators, Data Sources and Data Collection Instruments

Study Objectives	Indicators	Data Sources	Instrument
<p>1. Results achieved by the RDFs for making available products on a list of indicator drugs.</p>	<p style="text-align: center;">Primary</p> <p>1.1. Percentage of unexpired indicator drugs available at RDF on day of visit.</p> <p>1.2. Percentage of unexpired indicator drugs available at MOH dispensary on day of visit.</p> <p>1.3. Percentage of time out of stock for a set of indicator drugs at RDF.</p> <p>1.4. Percentage of total drug products in stock that are not on the MOH EDL at RDF.</p> <p style="text-align: center;">Secondary</p> <p>1.5. Percentage of stock records that corresponds with physical counts for a set of indicator drugs at RDF.</p> <p>1.6. Frequency and most recent date of physical inventory taking at RDF.</p>	<p>1.1. Physical check for presence of unexpired indicator drugs.</p> <p>1.2. Physical check for presence of unexpired indicator drugs.</p> <p>1.3. Stock records for the indicator drugs.</p> <p>1.4. Visual inspection and written listing of all drugs in stock.</p> <p>1.5. Comparison stock records for indicator drugs with physical count.</p> <p>1.6. Interview supplemented by request to see inventory document.</p>	<p>1.1. Availability and Stock Out Data Form for Indicator Drugs</p> <p>1.2. Availability and Stock Out Data Form for Indicator Drugs.</p> <p>1.3. Availability and Stock Out Data Form for Indicator Drugs</p> <p>1.4. List of All Drugs Stocked by Revolving Drug Fund</p> <p>1.5. Inventory Data Form for Indicator Drugs</p> <p>1.6. Revolving Drug Fund Stock Management Questionnaire</p>
<p>2. Degrees of financial sustainability achieved by the RDFs</p>	<p style="text-align: center;">Primary</p> <p>2.1. Rate of recovery for product acquisition and operating costs.</p> <p>2.2. Rate of decapitalization.</p> <p>2.3. Cost of drugs dispensed without charge as a percentage of the cost of all drugs dispensed.</p> <p style="text-align: center;">Secondary</p> <p>2.4. Percentage of dispensing episodes for which charges were fully or partially exempt.</p> <p>2.5. Utilization of double entry book keeping system.</p> <p>2.6. Frequency and most recent date of trial balances.</p> <p>2.7. Frequency and most recent data of audits.</p> <p>2.8. Existence of a bank account.</p> <p>2.9. Frequency and most recent date of bank deposits.</p>	<p>2.1. Records that provide (ideally) the following information for a defined 12 month period: Value of stock and money on hand at the beginning of the period; Value of any drugs donated during the period; Costs for salaries and purchases of equipment and expendable supplies; Value of stock lost due to expiration, theft or spoilage; and Value of stock and money on hand at the end of the period.</p> <p>2.2. Computed using the rate of cost recovery.</p> <p>2.3. Prescriptions or other records from which the acquisition costs of drugs dispensed free may be computed; and Records that allow the same computation for all drugs sold.</p> <p>2.4. Records from which may be derived the total number of dispensing episodes and the number of episodes for which there was no charge.</p> <p>2.5. Interview supplemented by request to see accountancy books.</p> <p>2.6. Interview supplemented by request to see trial balance documentation.</p> <p>2.7. Interview supplemented by requests to see audit documentation.</p> <p>2.8. Interview supplemented by request to see most recent bank statement.</p> <p>2.9. Interview supplemented by request to see deposit slip or most recent bank statement.</p>	<p>2.1. Income and Expense Statement</p> <p>2.2. Income and Expense Statement</p> <p>2.3. Income and Expense Statement</p> <p>2.4. Charge for Drugs Tally Form</p> <p>2.5. Revolving Drug Fund Financial Management Questionnaire</p> <p>2.6. Revolving Drug Fund Financial Management Questionnaire</p> <p>2.7. Revolving Drug Fund Financial Management Questionnaire</p> <p>2.8. Revolving Drug Fund Financial Management Questionnaire</p> <p>2.9. Revolving Drug Fund Financial Management Questionnaire</p>

Study Objectives	Indicators	Data Sources	Instrument
<p>3. Comparative costs of drugs sold by RDFs.</p>	<p style="text-align: center;">Primary</p> <p>3.1. Product acquisition costs as a percentage of international indicator prices for a set of indicator drugs.</p> <p>3.2. Product acquisition costs as a percentage of MOH acquisition costs for a set of indicator drugs.</p> <p>3.3. RDF sales prices as a percentage of retail sales prices for a set of indicator drugs.</p> <p style="text-align: center;">Secondary</p> <p>3.4. Existence of a system for obtaining multiple price quotations from potential suppliers</p>	<p>3.1. Invoices showing indicator drug purchase prices, plus international indicator drug prices, such as those produced by MSH or IDA.</p> <p>3.2. Invoices showing indicator purchase prices, plus prices paid by MOH at most recent routine purchase.</p> <p>3.3. RDF sales prices, plus retail prices.</p> <p>3.4. Interview supplemented by request to see quotations.</p>	<p>3.1. Revolving Drug Fund Indicator Drug Price Form and MOH and MOH and International Indicator Prices Form.</p> <p>3.2. Revolving Drug Fund Indicator Drug Price Form and MOH and MOH and International Indicator Prices Form.</p> <p>3.2. Revolving Drug Fund Indicator Drug Price Form and Retail Sales Prices for Indicator Drugs Form.</p> <p>3.4. Revolving Drug Fund Stock Management Questionnaire</p>
<p>4. Gross indicators of drug use at sites wherein RDFs are located.</p>	<p style="text-align: center;">Primary</p> <p>4.1. Percentage of MOH health facilities with EDL available in non-RDF dispensary.</p> <p>4.2. Percentage of RDF sites with MOH EDL available.</p> <p>4.3. Average number of drugs prescribed per curative outpatient encounter.</p> <p>4.4. Percentage of drugs prescribed from MOH Essential Drug List.</p> <p>4.5. Percentage of drugs prescribed by generic name.</p> <p>4.6. Percentage of outpatients prescribed an antibiotic drug.</p> <p>4.7. Percentage of outpatients prescribed an injectable drug.</p>	<p>4.1. Interview supplemented by request to see EDL.</p> <p>4.2. Interview supplemented by request to see EDL.</p> <p>4.3. For this and the remaining indicators, potential sources include: Facility daily register, patient records and prescription slips.</p>	<p>4.1. Health Facility Background Information Questionnaire</p> <p>4.2. Revolving Drug Fund Stock Management Questionnaire</p> <p>4.3. Prescribing Indicator Form</p>

APPENDIX B
SUMMARY OF SAMPLE DESIGN

Summary of Sample Design

The Sample Design has five elements:

- RDF Sites;
- MOH Facilities without RDFs;
- Retail Pharmacies;
- List of Indicator Drugs; and
- Prescribing Encounters

Information on each of these elements is summarized below.

1. RDF Sites

There are four types of RDFs now operating in Ethiopia: Liyu, Bamako Initiative, Ethiopian Red Cross and Kenema. The purpose of visiting the RDF sites is to collect data for deriving the 26 indicators required for realizing all four of the study objectives. RDFs from three geographical regions will be included in the study: Addis Ababa, Oromiya and SNNPR. The initial proposal is that the study be based on a stratified convenience sample of 18 RDF sites distributed among the three regions. The universe for these regions is 31 RDF sites of all types. The sample design for RDF sites is summarized in the table below. The numbers in parentheses are the total numbers of each type of RDF operating in the respective regions. The specific RDF sites in the sample are given in Berhanu Associates' *Inception Report*.

Region	Liyu	Bamako Initiative	Ethiopian Red Cross	Kenema	Total
Addis Ababa	4 (8)	1 (2)	1 (1)	4 (7)	10 (18)
Oromiya		1 (2)	3 (6)	2 (2)	6 (10)
SNNPR		1 (2)	1 (1)		2 (3)
Total	4 (8)	3 (6)	5 (8)	6 (9)	18 (31)

2. MOH Facilities without RDFs

The purpose of visiting MOH facilities without RDFs is limited to comparing the availability of indicator drugs at RDFs, with their availability at MOH sites that depend only on the conventional MOH distribution system for supply. A convenience sample of 20 MOH hospitals and health centers without RDFS will be distributed among the three regions covered by the study. The universe of MOH hospitals and health centers for the three regions is about 179 sites. The sample of MOH facilities is summarized in the table below. The specific sites are not yet selected, but it is assumed that they will be in geographical proximity to the RDF sites.

Region	Hospital	Health Center	Total
Addis Ababa	0 (7)	11 (17)	11 (24)
Oromiya	2 (16)	4 (67)	6 (83)
SNNPR	1 (7)	2 (65)	3 (72)
Total	3 (30)	17 (149)	20 (179)

3. Retail Pharmacies

The purpose of visiting the retail pharmacies is limited to obtaining prices for which the indicator drugs are being sold at these sites, so that they may be compared for the prices of these products at the RDFs. This too is a convenience sample. A total of 10 pharmacies will be visited: 4 in Addis Ababa, 3 in Oromiya and 3 in SNNPR. The specific sites are not yet selected, but it is assumed that they will be in geographical proximity to the RDF sites. For purposes of comparison, the median retail prices of the indicator drugs from this sample of pharmacies will be used.

4. List of Indicator Drugs

The list of indicator drugs provides the basis for collecting data and deriving indicators for drug availability and drug prices. The list should consist of from 20 to 50 products. Using such a list permits efficient comparison of availability and prices at RDF sites, MOH facilities without RDFs and retail pharmacies. Berhanu Associates' *Inception Report* provides an illustrative list of 20 products, which is attached. It is essential that the final list be developed in close collaboration with concerned MOH staff. In developing the final version of the indicator drug list, the following criteria should be used:

- All drugs should be drawn from the MOH Essential drug List and presumed to be available at all types of sites to be covered by the study.
- Drugs from a range of therapeutic categories should be included. For example, the list should probably include antibiotics, cardiovascular drugs, analgesics, parenteral solutions, and representatives of therapeutic categories used to treat priority public health problems identified by MOH.
- Drugs from a range of dose forms should be included, that is, tablets or capsules, oral liquids, injections, intervenous solutions and topical products. The matter of dose forms may be a critical issue. For example, if there is special interest in child survival activities, then it would be important to include available pediatric dose forms for treating such problems as diarrhoeal disease, malaria and ARI.

5. Prescribing Encounters

One of the objectives of the study is to measure gross indicators of drug use. These are summarized in Enclosure One, Part Four. The sample of prescribing encounters is drawn from prescriptions kept at the RDF sites. The prescriptions should be drawn using a random method from the month preceding the one in which data are collected. A minimum total of six hundred prescriptions is required. This suggests that at least 40 should be collected at each site. If the RDF site sample is reduced, then the prescribing sub sample per site must be increased.

A similar prescribing study was carried out in Ethiopia in 1995, with the results being published in the *Ethiopia Journal of Medicine* in 1998. The study team has been provided with a copy of the article and requested to contact the investigators of the earlier study and discuss with them methods and problems. The 1995 study was carried out at MOH sites without revolving drug funds, so with the prescribing part of the present study, we have an opportunity to make a comparison which assesses the impact of RDFs on selected prescribing practices.

APPENDIX C
QUESTIONNAIRES AND DATA COLLECTION FORMS

Revolving Drug Fund Background Information Questionnaire

RDF Location _____
 RDF Type _____
 H'lt Facility Type _____
 RDF In-Charge _____
 Phone Number _____
 Main Informant _____
 Mf's Position _____

Date _____
 Date Collector _____
 Site Code _____

1. In what year was this RDF established? _____

2. Which of the following were sources of the initial capital and in what form was it provided?

More than one answer is possible. For donors, NGOs and "Other," write in the name of the concerned organization. In each case where in capital was provided, write in the year in which it was provided. For "Drugs" and "Funds," simply put a check to indicate in which form(s) the capital was provided.

Name	Year	Drugs	Funds
MOH			
Facility			
Community			
Donor			
NGO			
Other: _____			

3. Who took the lead in establishing this RDF?

Put a check in the appropriate square to indicate which of the options listed was most responsible for starting the RDF.

MOH
 Facility
 Community
 Donor
 NGO
 Other: _____

4. Who is responsible for managing this RDF and what roles do they play?

For the different functions shown, put a check to indicate who is responsible.

	Select drugs	Provide staff	Audit books	Inventory stock	Keep cash	Keep bank ac't	Buy new stock	Approve purchases
MOH								
Facility								
Community								
Other: _____								

5. Which of the following are objectives of this RDF?

In the squares to the right, place a check to indicate the answer to this question. More than one answer is possible.

To make drugs more available
 To make drug use more rational
 To recover the cost of drugs

6. If cost recovery is an objective, what degree of cost recovery is sought?

In the appropriate square to the right, place a check to indicate the answer to the question. Only one of the options should be checked.

Partial recovery of drug costs
 Full recovery of drug costs
 Full recovery of drug costs plus profit
 Recovery of drug costs plus operating costs

7. Are all patients required to pay for drugs? Yes [] No []

8. If some patients are exempt from payment, what are the reasons for this?

In the squares to the right place a check to indicate the reasons for exemptions. More than one answer is possible. If there is a type of exemption not given among the options, describe it in the allotted space.

For indigence
 Age group (for example, children under 5 years)
 Health problem type (for example, for TB treatment)
 Special personal status (for example, veterans or civil servants)

Other Describe: _____

9. Who is responsible for approving exemptions, and how is this done?

If more than one type of exemption is given, it may be necessary to continue the answer on the attached page.

Describe: _____

10. What was the total number of dispensing encounters for the period July - September 1998?

Write the number in the square below. Note: A "dispensing encounter" is defined as an instance in which a patient obtains one or more drugs at the same visit. It does not matter if more if the patient paid or not, nor does it matter how many drugs were dispensed.

11. Does the RDF require patients to purchase the full course of treatment for drugs prescribed? Or does it allow patients to purchase a portion of the total number of units prescribed?

Ask the question of your informant and check the box corresponding to the answer give.

Purchase of full course of treatment required
 Purchase of partial prescription permitted

Revolving Drug Fund Stock Management Questionnaire

RDF Location
 RDF Type
 H'ith Facility Type
 RDF In-Charge
 Phone Number
 Main Informant
 MI's Position

Date
 Date Collector
 Site Code

Product Selection

1. Is there a copy of the MOH Essential Drug List available in the RDF site? Yes [] No []
2. Is purchase and stocking of drugs limited to products on the MOH Essential Drug List? Yes [] No []
3. Ask the main informant what are the criteria for deciding what drugs to stock, and summarize the answer below.

Procurement

4. With what frequency are drugs purchased?

Put a check in the appropriate square.

Monthly	
Quarterly	
Annually	
According to need	

5. What are the sources of drug procurement?

Put a check in the appropriate square.

Provided free by MOH	
Purchased from local distributors	
Purchased from local manufacturer	
Purchased from international source	
Other	

6. For drugs that are purchased, which are the most important suppliers, in terms of values of purchases?

Write the names of the five most important suppliers on the lines to the left, in descending order of magnitude of the value of purchases, based on the opinions of informants. In the squares to the right, put checks to indicate if the suppliers are domestic or international.

Supplier	Domestic	Inter'ntl

7. When making routine drug purchases does the RDF seek price quotations from more than one supplier?

Yes [] No []

If the answer to the previous question is "Yes," ask to see the quotation documents from the most recent routine purchase. Write the names of the suppliers submitting quotations on the lines below. If the requested documents are not provided, write "No documentation" on the top line.

Suppliers Submitting Quotations for Most Recent Routine Drug Purchase

8. When requesting quotes or when contracting with suppliers, does the RDF specify expiration dates?

Yes [] No []

If the answer to the question is "Yes," ask the informant what is the required period of time to expiry at the time of delivery and write the answer in the square below.

--

9. When drugs are purchased, are they ordered by brand name or generic name?

Ask the informant and then ask to see the most recent purchase orders for a routine procurement. Check the appropriate box to the right, based on your own observations.

Brand name	
Generic name	
Both	

RDF Location _____
 RDF Type _____
 HTH Facility Type _____
 RDF In-Charge _____
 Phone Number _____
 Main Informant _____
 MI's Position _____

Date _____
 Data Collector _____
 Site Code _____

Storage and Inventory Control

10. When new drugs are received from suppliers, what steps are carried out?

Important note: The correct steps are listed below. Do not reveal them to the informant. Simply ask the question and check the steps which the informant mentions. Do not prompt or hint at correct answers.

Verification of correct strength and packaging _____
 Physical count of units received against invoice _____
 Check that expiration dates are correct _____
 Visual check for damage or deterioration _____

11. How is stock arranged on shelves?

Ask your the informant and then look for yourself. Check the appropriate option below, based on your own a combination of shelf arrangements is possible.

In alphabetical order by product name _____
 By therapeutic category _____
 By dose form _____
 No apparent method _____

12. What type of inventory control or stock record keeping system is in use?

Ask the informant and then ask to see the system. Check the appropriate type, based on your own observation. Do not concern your self at this point with the quality of record keeping. This will be assessed using other forms in the package.

Stock record cards _____
 Bound journals or registers _____
 Computerized system _____

13. Are periodic physical inventories of stock taken?

Yes [] No []

If the answer is "Yes," ask what is the periodicity and check the appropriate box to the right.

Monthly _____
 Quarterly _____
 Annually _____

If the answer is "Yes," ask to see a copy of the most recent inventory report and record the date in the box below. If no document is provided write in "not available."

Site Name _____
 Site Location _____
 Site Type _____
 In Charge _____
 Phone Number _____
 Main Informant _____
 MI's Position _____

Date _____
 Data Collector _____
 Site Code _____

Staffing and Salary Expenditures

1. How many persons work at this RDF on a regular basis?

2. For each person working at this RDF, please give their name, position and educational qualifications.

Explain that the only reason for asking for names is to assure a complete count of all staff and that no party will be mentioned by name in the study.

Name	Position	Ed Qual

3. For each of the persons listed above, how many hours each month do they work at the RDF, who pays their salary and how much is their monthly salary?

Again, explain that this information will be kept confidential and no names will be used.

Name	Hrs/Month	Paid By	Sal/Month

Non Salary Expenditures

Drugs

Note: Information on how procurements are managed is gathered by the "Revolving Drug Fund Stock Management Questionnaire." The information gathered here is limited to sources of financing and financial record keeping.

4. When drugs are purchased, what are the sources of funding? In your opinion, what percentage of total purchases are paid for by each source?

For each of the potential sources listed, enter the informant's estimate of the percent of total funding provided by each. For "Donor Agency," "NGO," or "Other," write the names of the concerned organizations in the lines allotted for clarifications.

Source	Per Cent
RDF Revenue	
MOH	
Donor Agency	
NGO	
Other	

Clarifications: _____

5. Do you have records showing the costs of drugs purchased for the RDF?

Yes [] No []

If the answer to this question is "Yes," ask to see them, and depending on the result, check "Verified" or "Unverified," below.

Verified [] Unverified []

6. Do you have records showing the costs of drugs which have expired?

Yes [] No []

If the answer to this question is "Yes," ask to see them, and depending on the result, check "Verified" or "Unverified," below.

Verified [] Unverified []

Expendable Supplies

7. What are the sources of funding for the expendable supplies which the RDF procures?

For each of the expendable supply types, check the square for the organization which pays for it. For "Donor," "NGO," or "Other," write the names in the lines allotted for clarifications.

Supply Type	RDF	MOH	Donor	NGO	Other
Dispensing materials					
Stationary					
Cleaning supplies					

Clarifications: _____

Revolving Drug Fund Financial Management Questionnaire

Site Name _____
 Site Location _____
 Site Type _____
 In Charge _____
 Phone Number _____
 Main Informant _____
 MI's Position _____

Date _____
 Data Collector _____
 Site Code _____

8. Do you have records showing the costs of expendable supplies purchased?

Yes [] No []

If the answer to this question is "Yes," ask to see them, and depending on the result, check "Verified" or "Unverified," below.

Verified [] Unverified []

9. What equipment does the RDF procure and what are the sources of funding?

For each of the expendable supply types, check the square for the organization which pays for it. For "Donor," "NGO," or "Other," write the names of the concerned organizations in the lines allotted for clarifications.

Equipment Type	RDF	MOH	Donor	NGO	Other
Furniture					
Shelves or cabinets					
Office Equipment					
Computer					

Clarifications: _____

10. Do you have records showing the costs of equipment procured?

Yes [] No []

If the answer to this question is "Yes," ask to see them, and depending on the result, check "Verified" or "Unverified," below.

Verified [] Unverified []

Rent

11. Is any rent paid for storage, office or dispensary space used by the RDF?

Yes [] No []

If the answer is "Yes," who pays for this?

Put a check in the appropriate square below. If the answer is "Donor," "NGO" or "Other," write the names of the concerned organizations in the lines allotted for clarifications.

RDF itself	
MOH	
Donor	
NGO	
Other	

Clarifications: _____

12. Do you have records showing the costs of rent paid?

Yes [] No []

If the answer to this question is "Yes," ask to see them, and depending on the result, check "Verified" or "Unverified," below.

Verified [] Unverified []

Financial Management Practices

13. Does the RDF use a system of double entry book keeping?

Yes [] No []

If the answer to this question is "Yes," ask to see the books, and depending on the result, check "Verified" or "Unverified," below.

Verified [] Unverified []

13. Does the RDF prepare periodic trial balances?

Yes [] No []

If the answer to this question is "Yes," ask to see the documents, and depending on the result, check "Verified" or "Unverified," below.

Verified [] Unverified []

14. If trial balance are prepared, who performs them (position), what is the frequency, and the date of the most recent one?

Trial balances performed by _____

Frequency _____

Date of most recent trial balance _____

15. Are the RDF's books audited?

Yes [] No []

If the answer to this question is "Yes," ask to see the documents, and depending on the result, check "Verified" or "Unverified," below.

Verified [] Unverified []

BEST AVAILABLE COPY

Revolving Drug Fund Financial Management Questionnaire

Site Name
Site Location
Site Type
In Charge
Phone Number
Main Informant
MI's Position

Date
Data Collector
Site Code

16. If the books are audited, indicate below who performs the audits (position), what is the frequency, and what is the date of the most recent one?

Audits performed by _____

Frequency _____

Date of most recent audit _____

17. Does the RDF deposit its revenues in a bank account?

Yes [] No []

If the answer to this question is "Yes," ask to see the bank statements, and depending on the result, check "Verified" or "Unverified," below.

Verified [] Unverified []

18. If the RDF has a bank account, who makes the deposits (position), how frequently are deposits made, what is the date of the most recent one and are the account's signatories (positions).

Deposits usually made by _____

Frequency of deposits _____

Date of most recent deposit _____

Bank account's signatories _____

19. If the RDF does not have a bank account, what is the means for safe keeping of revenues?

Clarifications: _____

BEST AVAILABLE COPY

Availability and Stock Out Data Form for Indicator Drugs

RDF Location
 RDF Type
 Health Facility Type
 RDF In-Charge
 Phone Number
 Main Informant
 MI's Position

Date
 Data Collector
 Site Code

Note: Begin, by making a visual inspection for the presence of unexpired units of each indicator drug. For those available, write "1" in the "Available Today?" column. For those not available, write "0." For each of the 12 months, consult the stock records, and record for each product, the number of days out of stock. In the final column, sum for each product, the "Total Days Out of Stock."

Number	Indicator Drug/Dose Form/Strength	Available Today?	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	Total Days Out of Stock
1.	Amoxicillin tab 250 mg														
2.	Aminophylline 100 mg/ml (ampoule 1ml)														
3.	Paracetamol susp 100/ml (bottle 100 ml)														
4.															
5.															
6.															
7.															
8.															
9.															
10.															
11.															
12.															
13.															
14.															
15.															
16.															
17.															
18.															
19.															
20.															

18

Inventory Data Form for Indicator Drugs

RDF Location
 RDF Type
 H'ith Facility Type
 RDF In-Charge
 Phone Number
 Main Informant
 MI's Position

Date
 Data Collector
 Site Code

Note: The purpose of this form is to compare the quantities of indicator drugs shown to be present by the record keeping with the quantities physically present. In many cases, there will be delays between the dates when drugs are received or issued and the dates when these transactions are entered into the stock records. When this occurs, it is necessary to add in "Recent Receipts" and subtract out "Recent Issues" and compute an "Adjusted Total." In such cases, it is the "Adjusted Total" which is compared with the physical count.

Number	Indicator Drug/Dose Form/Strength	Counting Unit	Record Count	Recent Receipts	Recent Issues	Adjusted Total	Physical Count	Difference
1.	Amoxicillin tab 250 mg	tab						
2.	Aminophylline 100 mg/ml (ampoule 1ml)	ampoule						
3.	Paracetamol susp 100/ml (bottle 100 ml)	bottle						
4.								
5.								
6.								
7.								
8.								
9.								
10.								
11.								
12.								
13.								
14.								
15.								
16.								
17.								
18.								
19.								
20.								

Financial form 1 Location _____
 Name of RDF _____ Type of RDF _____

Income and Expense Statement x			
	Actual	Budget	Actual
	19	19	19
INCOME FORM			
GRANTS:			
Grants	---	----	-----
Donated drugs	---	----	-----
Total grants	-----	-----	-----
DRUG ACCOUNT:			
Sales revenue	-----	-----	-----
Less cost of drugs issued,	-----	-----	-----
	()	()	()
Less cost of expired drugs, etc.	-----	-----	-----
Surplus/deficit on drugs	()	()	()
EXPENSE			
Salaries	-----	-----	-----
Vehicle operations	-----	-----	-----
Other transport	-----	-----	-----
Packaging & labeling	-----	-----	-----
Utilities	-----	-----	-----
Office supplies	-----	-----	-----
Total operating expenditures	-----	-----	-----
Depreciation	-----	-----	-----
Total expenses	-----	-----	-----
Total income less expense	-----	-----	-----
DRUG STOCK ACCOUNT			
	<u>Actual 19</u>	<u>Actual 19</u>	
Opening stock	-----	-----	
Purchases	-----	-----	
Donations received	-----	-----	
	xxx	xxx	
Less cost of drugs dispensed	-----	-----	
	xxx	xxxx	
Less cost of drugs expired, etc.	-----	-----	
Closing stock	-----	-----	

Balance Sheet Month/Year		
	12/31/91	12/31/92
Assets		
Fixed assetsa		
Equipment		
Cost	-----	-----
Depreciation	-----	-----
Current assets		
Drug stock	-----	-----
Cash	-----	-----
Accounts recievable	-----	-----
	xxxx	xxxxx
Total assets	-----	-----
LIEABILITES AND CAPITAL		
Long-term liabilities		
Loan	-----	-----
Current liabilities		
Account payable	-----	-----
Capital		
Balance at beginning of year	-----	-----
Accounting adjustment	-----	-----
Donated assets	-----	-----
Surplus during year	-----	-----
Closing balance	-----	-----
Total liabilities and capital	-----	-----
FIXED ASSTES		
<u>Equipment</u>	<u>Cost</u>	<u>Depreciation</u>
Balance as of 1 2:92	-----	-----
Additions	-----	-----
Disposals	-----	-----
Annual charge	-----	-----
Balance as of 12 31:92	-----	-----

DATA COLLECTOR:

[Empty box for Data Collector Name]

| SITE AND DATE |
|---------------|---------------|---------------|---------------|---------------|
| 1. | 1. | 1. | 1. | 1. |
| 2. | 2. | 2. | 2. | 2. |
| 3. | 3. | 3. | 3. | 3. |
| 4. | 4. | 4. | 4. | 4. |
| 5. | 5. | 5. | 5. | 5. |
| 6. | 6. | 6. | 6. | 6. |
| 7. | 7. | 7. | 7. | 7. |
| 8. | 8. | 8. | 8. | 8. |
| 9. | 9. | 9. | 9. | 9. |
| 10. | 10. | 10. | 10. | 10. |
| 11. | 11. | 11. | 11. | 11. |
| 12. | 12. | 12. | 12. | 12. |
| 13. | 13. | 13. | 13. | 13. |
| 14. | 14. | 14. | 14. | 14. |
| 15. | 15. | 15. | 15. | 15. |
| 16. | 16. | 16. | 16. | 16. |
| 17. | 17. | 17. | 17. | 17. |
| 18. | 18. | 18. | 18. | 18. |
| 19. | 19. | 19. | 19. | 19. |
| 20. | 20. | 20. | 20. | 20. |
| 21. | 21. | 21. | 21. | 21. |
| 22. | 22. | 22. | 22. | 22. |
| 23. | 23. | 23. | 23. | 23. |
| 24. | 24. | 24. | 24. | 24. |
| 25. | 25. | 25. | 25. | 25. |
| 26. | 26. | 26. | 26. | 26. |
| 27. | 27. | 27. | 27. | 27. |
| 28. | 28. | 28. | 28. | 28. |
| 29. | 29. | 29. | 29. | 29. |
| 30. | 30. | 30. | 30. | 30. |

USE WITH INDICATOR: C.3

Key: 1=charges collected, 0 = no charges

Form Price #1

REVOLVING DRUG FUND INDICATOR DRUG PRICE FORM

RDF Location
 RDF Type
 H'th Facility Type
 RDF In-Charge
 Phone Number
 Main Informant
 MI's Position

Date
 Data Collector
 Site Code

Note: Columns 1 and 2 are preprinted. Data collectors fill in columns 3, 4, 5, 6, 8 and 9. Columns 7 and 10, which are shaded, are filled in by data processing staff. If more than one brand for a generic product is stocked, select the one with the lowest RDF purchase price.

1	2	3	4	5	6	7	8	9	10
Number	Indicator Drug/Dose Form/Strength	RDF Name (Brand or Generic)	Comp Unit	RDF Units Pur Pack	RDF Pack Pur Price	RDF Unit Pur Price	RDF Units Sale Pack	RDF Sale Pack Price	RDF Unit Sale Price
1.	Amoxycillin tab 250 mg	Cipamox	tab	1000		6/5			9/8
2.	Aminophylline 100 mg/ml ampoule (1 ml)	Aminofilina	ml	10					
3.	Paracetamol susp 100/ml (100 ml)	Dafalgan	ml	100					
4.									
5.									
6.									
7.									
8.									
9.									
10.									
11.									
12.									
13.									
14.									
15.									
16.									
17.									
18.									
19.									
20.									

MOH and International Indicator Prices for the Set of Indicator Drugs

Date _____
Data Collector _____

--

Note: For MOH price data, use records from the most recent routine procurement. For international indicator prices, use an indicator price guide such as those produced by MSH or IDA. Columns 7 and 10 are calculated, using data entered in the two columns which precede them.

1	2	4	5	6	7	8	9	10
Number	Indicator Drug/Dose Form/Strength	Comp Unit	MOH Units Pur Pack	MOH Pack Pur Price	MOH Unit Pur Price	Int ind Units Pack	Int ind Pack Price	Int ind Unit Price
1.	Amoxicillin tab 250 mg	tab	1000		6/5			9/8
2.	Aminophylline 100 mg/ml (ampoule 1ml)	ml	10					
3.	Paracetamol susp 100/ml (bottle 100 ml)	ml	100					
4.								
5.								
6.								
7.								
8.								
9.								
10.								
11.								
12.								
13.								
14.								
15.								
16.								
17.								
18.								
19.								
20.								

Retail Sales Prices for a Set of Indicator Drugs

Pharmacy Name
 Pharmacy Location

Date
 Data Collector

At each pharmacy, request the current selling price for each indicator drug. When more than one brand is stocked, use the price of the least expensive product.

1	2	3	4	5	6	7
Number	Indicator Drug/Dose Form/Strength	Comp Unit	Pharmacy's Name (Brand or Generic)	Units Pur Pack	Pur Pack Price	Retail Unit Price
1.	Amoxicillin tab 250 mg	tab	Cipamox	1000		6/5
2.	Aminophylline 100 mg/ml (ampoule 1ml)	ml	Aminofilina	10		
3.	Paracetamol susp 100/ml (bottle 100 ml)	ml	Dafalgan	100		
4.						
5.						
6.						
7.						
8.						
9.						
10.						
11.						
12.						
13.						
14.						
15.						
16.						
17.						
18.						
19.						
20.						

REVOLVING DRUG FUND INDICATOR DRUG PRICE COMPARISON WORK SHEET

RDF Location
 RDF Type
 H'lth Facility Type
 RDF In-Charge
 Phone Number
 Main Informant
 MI's Position

Date
 Data Collector
 Site Code

Note: This is not a data collection form. It is an illustration of a work sheet that could be used to compute price comparisons for individual sites. This can be done on a windows-based spread sheet program, using one sheet for each RDF. Supplementary sheets can be developed to aggregate data from all sites and derive ranges and averages.

1	2	3	4	5	6	7	8	9	10	11
Number	Indicator Drug/Dose Form/Strength	Comp Unit	RDF Unit Pur Price	RDF Unit Sale Price	MOH Unit Pur Price	RDF UPP/ MOH UPP	Int Ind Unit Price	RDF PP/ IUP	Retail Unit Price	RDF USP/ RUP
1.	Amoxycillin tab 250 mg	tab				4/6		4/8		5/10
2.	Aminophylline 100 mg/ml (ampoule 1ml)	ml								
3.	Paracetamol susp 100/ml (bottle 100 ml)	ml								
4.										
5.										
6.										
7.										
8.										
9.										
10.										
11.										
12.										
13.										
14.										
15.										
16.										
17.										
18.										
19.										
20.										

APPENDIX D
ILLUSTRATIVE REVISED WORKPLAN

Illustrative Revised Work Plan

Activity	Personnel	Start Date	End Date
<p>1. Preparation of Inception Report, proposing study design and work plan.</p> <p>2. Review and revise study design and work plan.</p> <p>3. Develop data collection instruments based on revised study design. Conduct "reality check" of instruments.</p> <p>4. Field test and revise data collection instruments.</p> <p>5. Recruit qualified data collectors.</p> <p>6. Train data collectors at all types of sites included in study.</p> <p>7. Collect data at all types of sites:</p> <ul style="list-style-type: none"> * RDFs * MOH facilities without RDFs * Retail pharmacies <p>10. Clean and make preliminary tabulations data.</p> <p>11. Prepare initial tables and graphs illustrating findings for all study objectives and indicators.</p> <p>12. Prepare text and integrate tables and graphs into final report.</p>			