



Primary Health Care Management Advancement Programme

SUSTAINABILITY ANALYSIS



MODULE 9
USER'S GUIDE



THE AGA KHAN UNIVERSITY



AGA KHAN FOUNDATION

Primary Health Care Management Advancement Programme

SUSTAINABILITY ANALYSIS

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University Research Corporation**

MODULE 9 USER'S GUIDE



Aga Khan Health Services

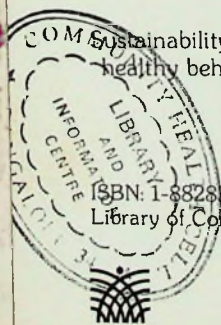


University Research Corporation
Center for Human Services



Sustainability of health outcomes requires teaching about and sustaining healthy behaviour. In Peru, a nurse visits a home to advise the mother on the proper care and feeding of her children

Photo by WHO



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***Dedicated to
Dr. Duane L. Smith (1939-1992),
Dr. William B. Steeler (1948-1992)
and all other health leaders, managers and workers
who follow their example in the effort to bring quality health
care to all in need.***



An overview of PHC MAP

The main purpose of the Primary Health Care Management Advancement Programme (PHC MAP) is to help PHC management teams collect, process and analyse useful management information.

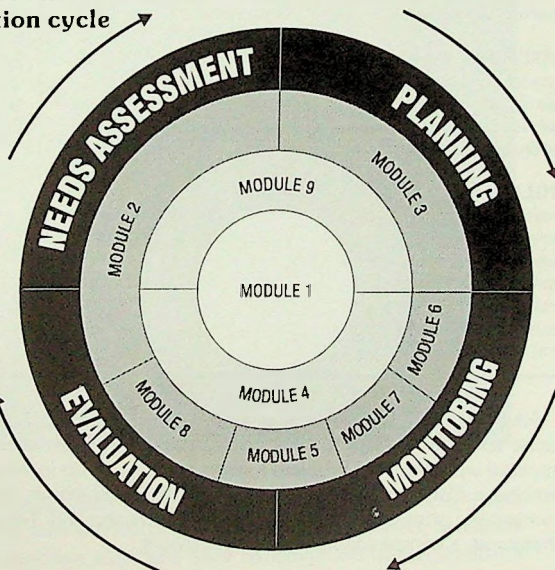
Initiated by the Aga Khan Foundation, PHC MAP is a collaborative programme of the Aga Khan Health Network¹ and PRICOR². An experienced design team and equally experienced PHC practitioner teams in several countries, including Bangladesh, Chile, Colombia, the Dominican Republic, Guatemala, Haiti, India, Indonesia, Kenya, Pakistan, Senegal, Thailand and Zaire, have worked together to develop, test and refine the PHC MAP materials to make sure that they are understandable, easy to use and helpful.

PHC MAP includes nine units called modules. These modules focus on essential information that is needed in the traditional management cycle of planning-doing-evaluating. The relationship between the modules and this cycle is illustrated below.

PHC MAP modules and the planning-evaluation cycle

PHC MAP MODULES

1. Information needs
2. Community needs
3. Work planning
4. Surveillance
5. Monitoring indicators
6. Service quality
7. Management quality
8. Cost analysis
9. Sustainability



1. The Aga Khan Health Network includes the Aga Khan Foundation, the Aga Khan Health Services, and the Aga Khan University, all of which are involved in the strengthening of primary health care
2. Primary Health Care Operations Research is a worldwide project of the Center for Human Services, funded by the United States Agency for International Development



Managers can easily adapt these tools to fit local conditions. Both new and experienced programmers can use them. Government and NGO managers, management teams, and communities can all use the modules to gather information that fits their needs. Each module explains how to collect, process and interpret PHC-specific information that managers can use to improve planning and monitoring. The modules include User's guides, sample data collecting and data processing instruments, optional computer programs, and Facilitator's guides, for those who want to hold training workshops.

The health and management services included in PHC MAP are listed below.

Health and management services

HEALTH SERVICES		MANAGEMENT SERVICES
GENERAL PHC household visits Health education	OTHER HEALTH CARE Water supply, hygiene and sanitation School health Childhood disabilities Accidents and injuries Sexually transmitted diseases HIV/AIDS Malaria Tuberculosis Treatment of minor ailments Chronic, non-communicable diseases	Planning Personnel management Training Supervision Financial management Logistics management Information management Community organisation
MATERNAL CARE Antenatal care Safe delivery Postnatal care Family planning		
CHILD CARE Breast-feeding Growth monitoring Nutrition education Immunization Acute respiratory infection Diarrhoeal disease control Oral rehydration therapy		

Several Manager's guides supplement these modules. These are: *Better management: 100 tips*, a helpful hints book describing effective ways to help managers improve what they do; *Problem-solving*, a guide to help managers deal with common problems; *Computers*, a guidebook providing useful hints on buying and operating computers, printers, other hardware and software; and *The computerised PRICOR thesaurus*, a compendium of PHC indicators.





Sustaining community-level health services means providing ongoing CHW training and technical support. In Bangladesh, a health worker teaches volunteer mothers how to weigh an infant, monitor weight-for-age, and detect and treat undernutrition early

Photo by Jean-Luc Ray for AKF



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Field tests:

Countries	Participating organisations; field test facilitators
Bangladesh	Aga Khan Community Health Programme, Dhaka; Social Marketing Programme; The Asia Foundation; Facilitator: Barkat-e-Khuda, URC/Bangladesh.
India	Junagadh PHC Project; Sidhpur Sustainable Health System Project, Gujarat; Facilitator: Neeraj Kak, URC, Bethesda, Maryland, USA
Kenya	Mombasa PHC Project; Facilitator: Maria Francisco, URC, Bethesda, Maryland, USA



Quick start

Basic sustainability analysis

(Do either or both parts)

Part 1: Strategic Assessment

This model assumes that your goal is to continue your current PHC programme as it is now, without any changes. That is, the objectives would be to: a) maintain current health status; b) maintain the current PHC services; and c) maintain the current resource mix. Enter your target group, services and objectives below.

Table 1: Coverage objectives and services - Example

Target group	PHC services	Coverage objectives
Children <2, <5 yrs	Child immunization	70% < 24 mos fully immunized
	Growth monitoring	55% < 5 yrs weighed
	Oral rehydration	65% < 5 used ORT last episode
	Nutrition education	<10% < 2 yrs low weight-for-age
Married women 15-49 yrs	Antenatal care & TT	70% pregnant enrolled in ANC
	Family planning	65% current users

Instructions. Examine the ten factors listed below. Identify those that you believe will affect sustainability over the next five years. Note whether the factor is a threat, neutral, or an opportunity. Describe it and estimate the magnitude of its effect (use 1-3 [-] for threats; or [+] for opportunities; and [0] for neutral.). Develop strategies to deal with serious and moderate threats so as to reduce their impact on sustainability. Develop strategies to take advantage of opportunities so as to increase their impact on sustainability. In the far right column, indicate the change in effect due to the strategy. In the effects columns, indicate the changes due to the strategies.

Revise and update these assumptions and strategies as often as you wish until you have an "optimal" strategy. That is one that will produce the best results possible given the available funds and other constraints that the project faces. Ideally, your strategy should neutralise all threats and take advantage of as many opportunities as possible. Summarise your strategy in writing and develop an action plan to implement it.

Part 2: Financial Assessment

This module assumes that your goal is to continue your current PHC programme as it is now, without any changes. That is the objectives would be to: a) maintain current health status; b) maintain the current PHC services; and c) maintain the current resource mix. Enter your target group, services and objectives as in Table 1 on page one.



Table 2: Sustainability Factors Worksheet-Example

Classify each factor, identify strategies where appropriate, estimate effect			
Factor: Threat/Opportunity; Description	Effect	Strategy	Effect
1. Target population size Threat: In-migration of 2% annually projected	--	Increase services: Raise revenues through increased fees, contributions; reduce costs via community in-kind contributions	0
2. Target group KAP (coverage) Threat: New clientele needs education, counselling	-	Strategy: Add special IEC sessions for new clientele.	0
3. PHC service quality Opportunity: Improving steadily	+	TQM already installed: Quality should improve; costs may decrease.	+
4. Management support Opportunity: Strong and improving	+	Expect increase in efficiency; Should lower costs later.	+
5. Organisational capacity Opportunity: Strong	+	No strategy at present: Could expand into other areas.	+
6. Political commitment Threat: Lack of community support	-	Hold 2-3 education/PR sessions in each community.	0
7. Personnel resources Threat: May lose key staff as donor support ends	-	Develop improved compensation package.	0
8. Revenues Threat: Losing some donor support in 1993	-	Develop alternative source of funds: fees, fund-raising, training.	+
9. Expenditures. Threat: Inflation of 3% annually (see revenues) Other lines increasing, some decreasing	-	Increase revenues > 3%.	+
10. Environmental. Neutral: No changes expected	0		



Instructions: Load the computer file (MOD9_QS.WQ1) into Quattro Pro Press Ctrl + W to widen columns.

1. In Table 3 (shown below), enter the revenues and expenditures for the current year (CY) (or the last 12 month period). The program will copy those figures into the following five years and compute the balances for you.
2. Move to Table 4 and enter any changes that you think are appropriate, based on the strategy that you developed in Part 1. For example, if you expect revenues to increase 5% each year, enter .05 in that cell. Make other changes in the Services and Coverage boxes as appropriate.
3. Conduct a "What-if" analysis by changing any or all of the revenue, cost, and other assumptions in Table 4. Observe the effects of these changes in Table 3.
4. If you want to see a graph of this table, press F10. Then press <ESC> to return to this screen. Save the file under a different name so that you can use this file again.

Table 3: Input-estimates

Enter revenues and expenses for the current year						
	Current Yr	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5
Revenues	343	370	400	432	467	504
Expenses	365	381	399	417	435	455
Balance	(22)	(11)	1	15	32	49

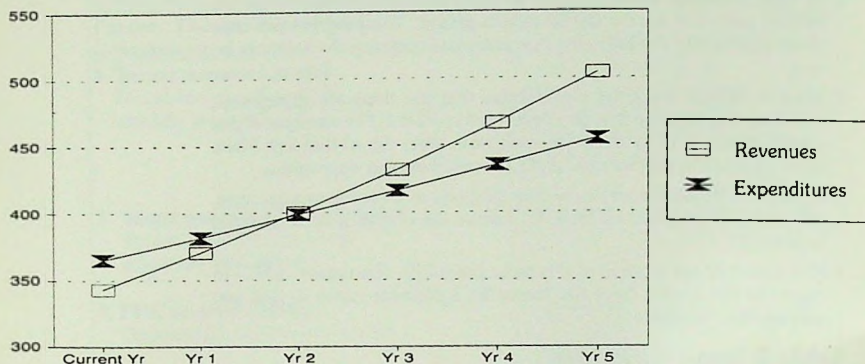
Make changes in the assumptions by entering percent changes in the What-if analysis cells (Table 4). For example you expect to increase coverage by 5% each year, then enter .05 in Coverage. You may expect to increase Revenues by 6% annually. If so, enter .2 in Revenues. You may expect to decrease PHC services by 3% each year (enter -.03). If you increase Organisational capacity (efficiency) or In-kind contributions that will DECREASE costs. Your objective is to find a realistic combination of assumptions that will produce a positive balance. That is when revenues exceed expenditures. When you reach this point, revise or update your strategy (Part 1) as appropriate.

Table 4: What-if analysis

Enter projected annual % increase (+) or decrease (-)			
Positive factors		Negative factors	
A+ will increase revenues or decrease costs		A+ will increase costs or decrease revenues	
A- will decrease revenues or increase costs		A- will decrease costs or increase revenues	
Revenues (+R)	6.0%	Expenses (+E)	3.0%
Organisational capacity (-E)	3.0%	Inflation (+E)	5.0%
In-kind contributions (-E)	0.0%	Target group size (+E)	3.0%
Political commitment (+R)	5.0%	Target group coverage (+E)	5.0%
Environmental factors (+R)	-3.0%	Personnel resources (+E)	1.0%
		PHC service quality(+E)	-5.0%
		Management support (+E)	-4.5%



Projected revenues and expenditures (5 Years)



Manual calculation: You can do the "what-if" analysis by hand also. To do this total the percentages in the Revenues, Political commitment and Environmental factor columns. Notice that these are all labeled (+R), meaning that a positive entry will increase revenues (and a negative entry will decrease revenues). Using the table, the formula would be: $6\% + 5\% + (-3\%) = +8\%$. Add this percentage to 343 to get 370.44, which is the new projection for Yr 1. Do the same for the next column. Multiply $370.44 \cdot 8\%$ to get 26.64. Sum that to get 399.64 for Yr 2. A short cut is to multiply the percentage plus 100% x the amount in Table 3. For example: $1.08 \cdot 343$, and $1.08 \cdot 370$.

Compute the changes in expenditures the same way. Add up all of the remaining factors. The first two, Organisational capacity and In-kind contributions, are negative. As they increase expenses decrease. All the other factors: Expenses, Inflation, etc. are positive. As they increase, so do expenditures. You only need to remember to change the signs for two factors (Organisational capacity and In-kind contributions). Thus, the first two factors would be -4 and -0. All of the remaining factors would be entered as they appear. Thus the first formula would be $(-3.0 + 3 + 5 + 3 + 5 + 1 - 5 - 4.5)$ or 4.5. Multiply $1.045 \cdot 365 = 381.4$. then multiply $381.4 \cdot 1.045$, and so on.



Introduction

What is the purpose of this module?

This module will provide PHC managers (and others) with guidelines and tools that they can use to develop and analyse sustainability strategies.

Many PHC programmes are being asked to develop strategies for sustaining their services. Donors are especially interested in such strategies. They are asking when they can phase out their support – when the PHC programmes will be able to stand on their own.

Programme managers are starting to consider sustainability in planning their programmes, for a number of very good reasons, including:

- Decreases in funding from developed countries
- Diversion of available funds to Eastern Europe
- A need to reallocate resources to operate at more affordable levels
- Shifts from donor-initiated interventions to community-controlled PHC
- Promotion of community self-awareness in health care as the basis for continuity

The module shows how to carry out a strategic assessment as well as a financial assessment of sustainability. The manager can choose to do one or both of these analyses. The **strategic assessment** shows how to analyse future sustainability by examining the effects of ten factors:

- | | |
|--|------------------------|
| 1. Population size and composition | 3. PHC service quality |
| 2. Target group knowledge, attitudes and practice (coverage) | 4. Management support |



- 5. Organisational capacity
- 6. Political commitment
- 7. Personnel resources

- 8. Revenues
- 9. Expenditures
- 10. Environment

It describes how to identify those that are potential threats and those that are opportunities to enhance sustainability. It also describes strategies for overcoming such threats and taking advantages of opportunities. Then it shows how to alter projections by changing assumptions and strategies.

The **financial assessment** shows how to assess the effects of the factors on future revenues and expenses, and how to project revenues and expenses over the next five years. The computerised version of the assessment includes a "what-if" analysis feature that lets you change your assumptions and immediately see the effects on projected revenues and expenditures.

The goal of the sustainability analysis is to find a strategy that will produce an acceptable level of services at a cost the programme can afford while minimising the threats to sustainability.

This sounds like a complex undertaking, but the module presents some simple computer programs that can help managers make projections and changes in assumptions easily and quickly.

The module does not tell you what to do to become sustainable. And it does not develop a strategy for you. Rather, it is a tool that you can use to develop your own strategy. It helps you examine a large variety of options relatively quickly, using rough estimates of key variables. Once you have settled on a general strategy, you can develop a detailed plan, either as part of your regular planning process, or as a special task.

Who should use this module?

The module can be used by anyone who is interested in analysing the sustainability of a PHC programme. Typically, that will be managers, administrators, boards of directors, and others who are responsible for setting policy and programme goals. Donors and consultants may find the module to be a helpful aid for stimulating strategic planning by PHC managers and staff.



Ideally, users should have a background in planning, evaluation, MIS, and/or finance. A team approach is best, because a large number of assumptions and projections need to be made, and a knowledgeable and experienced group can do that better than an individual.

Sustainability is often of greater concern to private PHC programmes than government ones. Yet, public programmes can benefit from sustainability analysis, also. The information can be especially helpful in defending budget submissions.

The module can be used without a computer, but a computer is strongly recommended, especially for the financial assessment. That is because the computer is a great tool for doing "what-if" analyses quickly. A sustainability analysis often involves making many changes in assumptions to see their effects on revenues and expenses. When the manager wants to change an assumption, e.g., "What if the population grows by five percent instead of eight percent?"; this can be done easily and quickly on a computer. But it requires tedious calculations if done by hand. The computer programs are written in Lotus 1-2-3 and Quattro Pro and are not complicated. But someone on the team should have a working knowledge of this programme.

What is sustainability?

Sustainability is a relatively new word. In fact, it doesn't appear in any dictionary. However, Webster's dictionary defines "sustain" as, to "keep up, prolong." It usually implies maintaining something that already exists. The term is often equated with "self-sustaining" and "self-sufficient," which means that no outside support is needed.

When people ask how sustainable a PHC programme is, they usually want to know what the chances are that the programme can be continued. When donors ask that question they usually want to know whether the programme will be able to continue after donor support ends.

These are legitimate questions, since many programmes, in education, agriculture, as well as health, have collapsed when donors withdrew their support. Thus the interest in sustainability is first and foremost an interest in ensuring that the PHC services, and the benefits they produce, can



be continued.

While sustainability has a general definition, as suggested above, each user of this module will need to define his or her objectives and identify any restrictions on the definition of sustainability as it applies to the specific programme. The issues that users must address are discussed in Step 2.



How to use this guide

How it is organised

This User's guide includes a series of procedural steps that describe how to do a sustainability analysis, explanations of sustainability factors you should examine, and instructions for carrying out simple and more detailed analyses. There are also illustrative worksheets and checklists. There is also a computer disk with spreadsheets for the Quick start and Levels 1-3. You may elect to perform a comprehensive assessment of both financial and strategic factors or to limit your attention to one or the other.

Sustainability analysis is presented as a series of seven steps, as described below.

Step 1: Identify the **users** and specify the **purpose** and **scope** of the sustainability analysis. You decide why and for whom you are conducting the analysis, and identify what to include.

Step 2: Clarify your **objectives**. Decide what you want to sustain and at what level. Also identify any restrictions on future funding sources.

Step 3: Decide on the **level of detail** needed. Decide if you want to do one or both of the assessments - strategic and financial. Then decide how detailed the assessment should be - select Levels 1, 2, or 3 for each assessment.

Step 4: Conduct a **strategic assessment**. If you selected a strategic assessment, this step shows you how to do it. You will assess the positive and negative effects of ten factors on the sustainability of your programme.



Step 5: Consider strategic responses to **threats** and **opportunities**. In this step you develop strategies to neutralize threats and to take advantage of opportunities.

Step 6: Conduct a **financial assessment**. If you selected a financial assessment, this step shows you how to do it. You project revenues and expenditures over the next five years and then conduct a "**what-if**" **analysis**. This allows you to see **what** would happen to sustainability if you varied one or more of the ten factors.

Step 7: Select a **sustainability strategy** and develop an **action plan**. You finalize your projections and assumptions and summarize your strategy for neutralizing threats and taking advantages of opportunities.

You are likely to repeat several of these steps as your analyses become more refined. Just follow the instructions and examples, use the worksheets and templates, and you can carry out an analysis, either by hand or using a computer.

Strategic and financial assessments.

The module separates sustainability into two independent, but inter-related assessments. The first is a non-financial examination of the big picture, which we call a **strategic assessment**. You are shown how to define what you want to sustain, and then how to assess the effects of ten sustainability factors on your objectives. You are then shown how to develop strategies to neutralise threats and to take advantage of opportunities.

That may be all you need to do. However, you may also want to do a **financial assessment**. You are shown how to make financial projections of revenues and expenditures for the next five years, and how to adjust those projections to take account of expected changes such as the end of a grant and inflation. If you wish to link the financial assessment to the strategic one, you can do that by making adjustments to your projections. You are shown how to estimate the financial implications of each of the ten sustainability factors. Finally, you can make changes in those estimates in a "**what-if**" **analysis**. This will allow you to see the effects of different strategies on financial sustainability.



Like several modules, this one also offers several levels of detail, which we call Level 1, Level 2 and Level 3. In addition, there is the Quick start version.

Quick start is the simplest and easiest to use. This is designed to provide a **quick analysis of current sustainability**. It may be all that you need. It only takes a few hours. There is a section on strategic assessment and another on financial assessment. If you want to do the latter quickly, use the computer file that accompanies this module, named MOD9_QS.WK1 or MOD9_QS.WQ1.

Three
levels

Level 1 allows you to make more detailed assessments. The **strategic assessment** is the same as in the Quick start except that you can also make assessments of the financial implications of each factor. The financial assessment enables you to make projections of revenues and expenditures based on your programme's "General Ledger Items," (which are often called line items in your budget). You use a "what-if" analysis to adjust your projections so that you can reach a "break-even" point, where revenues equal expenditures.

Level 2 expands the analysis to make more detailed assessments of **PHC and management services**. You assess the threats to and opportunities for each of your PHC services, such as child immunization, ANC, family planning, and so on. You do the same for your key management services: planning, training, supervision, community participation, and so forth.

Level 3 is the most comprehensive assessment. It permits you to develop more detailed estimates of **demand and need for PHC services**. This level of analysis is especially important if significant changes are expected in the size and composition of the programme's target populations. These changes could be due to migration, expansion or reduction of the target area, inclusion or exclusion of PHC services, population growth, and so forth.

You can do a more precise assessment of your sustainability options as you move up through each level of detail. But, of course, it takes more time and is more complex. You can also mix your analyses. For example, you can do a detailed Level 3 Strategic assessment, but a less detailed Level 1 Financial assessment. You might prefer this if, for example, your financial system doesn't break costs out by type of PHC service.



The
appendices

Sustainability factors: Each of the ten sustainability factors is described in more detail in **Appendix A**, with suggested indicators for assessing each factor, and suggested strategies for dealing with factors that threaten sustainability.

Computer templates: For those who want to conduct their sustainability analysis via computer, copies of the Levels 1, 2, and 3 templates are included on the Module 9 computer disk. They are illustrated in **Appendix B**, which also includes instructions for their use. These templates run on Lotus 1-2-3, Quattro Pro or almost any other compatible spreadsheet.

Worksheets: Many of the steps ask you to decide what you are going to do. The worksheets offer a handy place to record those decisions. There are also some checklists to help you remember key points or options. A blank set of these worksheets and checklists is included in **Appendix C** for reproduction.

How to begin

Read the next section, **Sustainability analysis procedures**, and decide what you want to analyse and the amount of detail you want. You can select any of the three levels of analysis: Levels 1, 2, or 3. However, you may find it easiest to begin with the Quick start to get a quick picture of your sustainability prospects. Then move to Level 1. You can limit your initial analysis to a single PHC service or geographic area, or you can look at the entire programme.

We have assumed that most users will want to look five years into the future. However, you can adapt the spreadsheets to fit whatever time period you choose. You can even do a long-range 25-year analysis by making five, five-year projections. You can limit your analysis to the strategic assessment, or you can go straight to the financial assessment. It is best to do both, of course, starting with the strategic assessment.

You will be asked to make a number of estimates, using your best judgement. These estimates do not have to be precise, since you are examining broad sustainability options over an uncertain future. The objective is to work out a general strategy, not a detailed plan. Once you have settled on a general strategy, then you can work out a detailed plan as part of your regular planning process. Therefore, do not be too concerned if your estimates are not exact.



After completing the Quick start, we recommend that you begin with the basic analysis in Level 1 and project what it would require in both strategic and financial adjustments to continue your PHC programme exactly as it is today. This is the most logical place to start. You can examine options for expanding or contracting services later.

Move on to Levels 2 and 3 as you see the need. Each takes more data and time, but each provides more data for decision making, also.

You should continue your analyses until you achieve an "optimum" sustainability strategy. That is a strategy that is the best that your programme can do, given the constraints it faces, that is, limited revenues, increasing population growth, etc. Your strategy will include a number of assumptions and requirements that will have to be met for it to be effective. These should be recorded and carefully examined to determine whether or not they are realistic. Examples of important assumptions could be: the Ministry of Health will provide vaccines for immunization; political support for MCH will continue; and, in-migration will be limited to "X" percent per year.

Finally, once a reasonable sustainability strategy has been agreed to, your staff can prepare a detailed plan and budget as part of the normal programme planning process. A special "action plan" should be developed to describe what will be done to ensure that the sustainability assumptions and/or requirements are met.

Sustainability planning is likely to be an iterative and ongoing activity. Assumptions, goals and strategies should be re-examined and updated annually, at least. Some programme objectives, target populations, or technical interventions may have to be dropped so that resources can be concentrated on those more likely to survive. Thus, it would be helpful to conduct at least a Level 1 analysis each year.

**An iterative,
ongoing activity
to do at least
annually**



Sustainability analysis procedures

This part of the User's guide describes how to carry out a sustainability analysis. Appendix B provides more detailed guidelines, organised by level of detailed analysis, but even experienced users should start by reviewing these general procedures.

The first three steps help managers define the objectives, scope, and level of detail of the analysis. Since "sustainability" means different things to different people, these steps can also help you reach consensus on an operational definition for your specific analysis.

The next three steps describe how to set up, analyse, and manipulate data to examine sustainability options. The last two steps provide suggestions for selecting a sustainability strategy and developing an action plan to carry it through.

Step 1: Identify the users and specify the purpose and scope of the analysis

Before beginning a sustainability analysis, the manager needs to decide: who will be the user/audience of the analysis, the purpose of the analysis, and the scope, that is, the services and geographic area to include, and the time frame.

- **The user or audience.** The manager, board of directors or central directorate in a public programme, and donors are likely users. Don't forget community representatives. It can help to develop "ownership" of the sustainability strategy if they are involved from the beginning, especially

Users, purpose
and scope



WORKSHEET FOR SPECIFYING THE PURPOSE OF THE ANALYSIS

User/audience:

- | | |
|--|---------------------------------------|
| <input checked="" type="checkbox"/> Manager | <u>Management team</u> |
| <input checked="" type="checkbox"/> Board of directors | <u>Especially chairman, treasurer</u> |
| <input type="checkbox"/> Central directorate | |
| <input checked="" type="checkbox"/> Donors | <u>Foundation rep</u> |
| <input type="checkbox"/> Community | |
| <input type="checkbox"/> Other | |

Purpose:

- | | |
|---|--------------------------------|
| <input type="checkbox"/> General knowledge | |
| <input type="checkbox"/> Monitoring progress | |
| <input checked="" type="checkbox"/> Planning for the future | <u>Need 5-10 year strategy</u> |
| <input type="checkbox"/> Decision-making | |
| <input type="checkbox"/> Other | |

Scope:

- | | |
|--|-------------------------------------|
| <input checked="" type="checkbox"/> Geographic area | <u>Entire project area</u> |
| <input checked="" type="checkbox"/> Programme/project/activity | <u>All services, entire project</u> |
| <input checked="" type="checkbox"/> Time/duration | <u>five years</u> |

if the communities are expected to play a significant role in programme activities.

- **Purpose.** Is the information simply desired for general knowledge, to evaluate progress in achieving sustainability, or to make a specific decision? The last is the most serious, and the decision to be made should be clearly stated so that the analysis can concentrate on providing information needed for that decision. Typical decisions are: continue or close the programme or its components; expand or contract the scope and size of the programme; and restructure the programme to become self-sufficient.
- **Scope.** The manager should determine:
 What **geographic area(s)** will be included; the entire country, a region, a city, several rural sites?
 How much **programmatic detail** is desired? Is it sufficient to look at the overall PHC programme, or does the user want to examine the sustainability of specific health outcomes or services (ANC, ORT, training, etc.).



What **time frame** should the analysis cover: the next year, the next five years, the next six months, the next 25 years?

If there are multiple users/audiences, it would be helpful to get each one to state their purposes and desired scope, since each one could have different objectives that would require distinct analyses.

Step 2: Clarify the objectives

Sustainability is a new term, and people have differing views as to its meaning. The important thing is to agree on a definition for this analysis rather than for the term as it is used more generally.

There are at least three facets of your sustainability objective that you should define clearly. The first is **what** you want to sustain. Is it the end result (health outcomes/coverage), the intermediary mechanisms (services/institutions), or the resources (income/staff/facilities, etc.)? The second is the **level or magnitude** to be sustained. It could be the same as now, somewhat higher, or somewhat lower. The third is to identify any **restrictions** on the sources of support. That is, to what degree must the programme be self-sustaining?

Although many people think only of money when they hear the word sustainability, that is not the perspective taken here. We look at sustainability as consisting of three inter-related parts: the desired outcomes (health/coverage), the services (or institutions), and the required resources.

Objectives

Resources → PHC services → Health outcomes

In developing a sustainability strategy, the manager must select one of these as the principal objective. That is because the three are inter-dependent and a change in any one affects the other two. For example, if a manager wants to sustain a certain package of **PHC services**, that determines what the outcomes will be, and the resources that will be needed. However, if the manager wants to sustain certain **outcomes**, that determines the services needed, which in turn determines the resource requirements. If the manager



wants to sustain a certain mix and level of **resources**, that determines the type and amount of services that can be provided, which in turn affects the outcomes that will be produced.

Thus, the manager must set the level desired for resources, services **or** outcomes and then calculate the effects on the other two.

Ideally, we should begin at the end of this resource-service-outcome chain, with the desired outcomes. We should first ask, "What levels of health status and coverage does the programme want to sustain?" Then, we can calculate the types and levels of PHC services needed to achieve those outcomes, and then the types and levels of resources needed to provide those services. This is basically what we do in planning.

OPTIONS: WHAT TO SUSTAIN

- **Health outcomes/coverage.** If this is your priority, then identify the priority target groups. The worksheet lists the most common target groups for PHC. Check off those that apply, or write them in. Write in the coverage objective for each target group, e.g., 70% of children under two fully immunized. If you have gone through Module 1 recently, copy the information from Worksheet A.
- **PHC services/institutions.** If this is the priority, identify the PHC services and management support activities or institution(s) that need to be sustained. If health coverage is your **primary** objective, then list the essential services as your **secondary** objective. Identify those services that need to be sustained in order to achieve coverage objectives. Typical services for children are ORT, immunization and growth monitoring. Typical PHC services for women are antenatal care, tetanus toxoid, and family planning. If you are planning to sustain clinical and outreach services, be sure to state this. Identify the management functions to be sustained: planning, supervision, training, etc.

Sometimes the users are interested in sustaining service agencies or institutions. Examples are: the Ministry of Health's outreach department, a local hospital, a Red Cross chapter, a community health worker association. There may also be certain parts of organisations that the user wants to make sure are sustained, and they should be identified, also. Examples are a regional training unit, a research and evaluation unit, a library, a laboratory, and a school health unit.

- **Resources.** It is also helpful to know if there are any specific resources that the user wants to sustain. Obviously, funding is essential, but there may be specific sources of funding that the user has in mind, for example, state grants, training fees, and income generation revenue. Some types of contributions may be important to sustain as well. High on the list of many PHC programmes are in-kind contributions from community organisations, CHWs, health committees, space, equipment, furniture, etc.

Finally, there may be some specific types of personnel that are essential and must be sustained if the programme is to be effective. Examples are outreach workers, clinic nurses, an MIS specialist, trainers, administrators, etc.



Realistically, many managers work with fixed budgets (resources). They may have to work forward, starting with available resources and then the questions are: 1) what services can we sustain with the available resources; and 2) what health outcomes can we expect to sustain through those services?

Still other managers are primarily concerned with sustaining their existing services and institutions. They may want to begin in the middle with PHC services. Their questions would be, "What resources will be needed to sustain these services or this institution?" and, "What health outcomes can we expect to achieve through these services or this institution?"

Managers who are inclined to focus on sustaining their institutions (organisations) rather than services and health outcomes, should carefully consider whether the services are more important than the implementing institution, or vice-versa. Some organisations truly are essential for future health outcomes, but others are not. In any case, the importance of a single organisation may change as people turn to other sources for services, or as community organisations and families take increased responsibility for their own health.

Use the worksheet on the following page to define what you want to sustain and the level for your first priority. Obviously, if the objective is to sustain the programme, services, institutions and resources exactly as they are right now, then all of these elements do not need to be listed individually. But if changes are expected through expansion or contraction, then it will be important to note that here.

"Sustain" usually implies maintaining current outcomes, services and the resources required to do so. If coverage is 80 percent, the question will usually be, "How can we maintain that level of coverage?"

But what is to be sustained in the future could be more or less than what exists currently. If coverage is low, say 20%, the objective may be to increase it in the future to, say 50%, not merely maintain the current low level. But this may not be realistic; 25% may be realistic. Some PHC programmes have had to reduce services to sustain them-

**Define what to
sustain**



WORKSHEET FOR SPECIFYING OBJECTIVES WHAT TO SUSTAIN AND AT WHAT LEVEL

Priority health coverage:	Indicators	Level
<input type="checkbox"/> Children < 5		
<input checked="" type="checkbox"/> Children < 2	<i>See Worksheet A, Module 1 for list</i>	<i>Same</i>
<input checked="" type="checkbox"/> Pregnant women	<i>See Worksheet A, Module 1 for list</i>	<i>Same</i>
<input checked="" type="checkbox"/> Married women 15-49	<i>See Worksheet A, Module 1 for list</i>	<i>Same</i>
<input type="checkbox"/> Other		
Services/institutions:		
<input checked="" type="checkbox"/> PHC outreach services	<i>GM, ORT, Nutrition education</i>	
<input checked="" type="checkbox"/> PHC clinical services (list)	<i>Immunization, ANC, FP</i>	
<input type="checkbox"/> Management functions (list)		
<input type="checkbox"/> Agency/institution/unit (list)		
<input type="checkbox"/> Other		
Resources:		
<input type="checkbox"/> Funding (specify)		
<input type="checkbox"/> Contributions (cash, in-kind)		
<input checked="" type="checkbox"/> Personnel	<i>Core technical staff</i>	
<input type="checkbox"/> Technical capability		
<input type="checkbox"/> Other:		

selves at a more affordable level. A reduction to 15% may be necessary. Others have added new services to attract revenues from other sources. For example, some PHC programmes have added maternity centres, training centres, and income generating activities to the standard PHC service package.

Thus, the manager must not only specify what is to be sustained, but also the level — which could be the current level, something less, or something greater.

The results could be summarised in a simple table, as shown in Table 1 of the Quick start chapter on page 1. It is the same format as used in Module 1. In fact, you could use that table if it reflects your sustainability objectives.



In that example the manager simply wants to sustain the current programme for another five years. There is no intent to expand, increase services or coverage, but just to survive. Thus, the objective is to **maintain the current level and mix of PHC services to the current target population.**

Finally, the manager must clarify whether "sustainability" implies restrictions on sources of support or not. As noted above, donors tend to be interested in seeing projects continue after their support ends. They may be willing to provide support initially only if the project can demonstrate that it will become "self-sustaining" at some point in the future. This could mean "without any external support," which is a very serious restriction. Strictly speaking, a project that is self-sustaining would operate entirely on income generated from sales of its services and products. It would not need grants, in-kind contributions, donations, or any other unearned resources. Private sector providers usually fall into this category. If they do not generate enough income to pay all of their bills, they go out of business.

**Specify
restrictions**

Many projects consider themselves sustainable if they can generate grants from other donors to replace those of current donors. These grants could come from local philanthropists, businesses, tax revenues, fund-raisers, as well as national and international foundations, UN agencies, foreign assistance agencies, and the like. Some donors frown on "substitution grants," but some believe they are legitimate, depending on the source.

Therefore, to avoid any misunderstanding between donor and grantee over the meaning of sustainability, these three facets of the term must be defined to make sure that the results of the analysis are acceptable to all of the users.

**WORKSHEET FOR SPECIFYING THE RESTRICTIONS
ON SUSTAINABILITY**

Sustainability restrictions

☐ No restrictions

☒ Donor restrictions

☐ Other

☐ Self-sustaining

Donor wants to phase out in 3-5 years



Step 3: Decide on the level of detail needed

At this point the manager and other users must make two preliminary decisions:

- whether to conduct a strategic assessment, a financial assessment, or both; and
- which level of detail to select for each.

Decide level of detail

As mentioned previously, a strategic assessment allows you to look at the "big picture" to determine the combined effect of the ten sustainability factors on your programme. A financial assessment enables you to make projections of future revenues and expenditures, and then to adjust them to see the effects of changing assumptions.

You also need to decide whether to conduct a Level 1, 2, or 3 analysis - or all three. We have already recommended that everyone do a Level 1 analysis, since it is quick and simple. After completing this, you may decide to do a Level 2 or 3 analysis, also. Or you can decide now which level or levels you want to conduct. If you haven't done so already, you may want to glance through Appendices A and B, which provide the instructions for each level. This may give you a good idea of what is involved in each Level.

The boxes that follow summarise the data you will need to have for each level of analysis.

WORKSHEET FOR SELECTING THE TYPE OF ASSESSMENT AND LEVEL OF DETAIL	
Strategic assessment: Check the level of analysis to be undertaken	
<input checked="" type="checkbox"/> X	Level 1: A general analysis of each of the ten factors
<input type="checkbox"/>	Level 2: A general analysis of eight of the factors plus a detailed assessment of two of them. You assess each PHC service and each management service .
<input type="checkbox"/>	Level 3: A general analysis of six of the factors plus a detailed assessment of four of them. You assess the effects of changes in target population size and target group KAP (coverage) on each PHC service and each management service .
Financial assessment: Check the level of analysis to be undertaken	
<input checked="" type="checkbox"/> X	Level 1: A general analysis of revenues by source and expenditures by general ledger items; and a "what-if" analysis of the effect of changes in the ten factors on future revenues and expenditures.
<input type="checkbox"/>	Level 2: A detailed analysis of revenues by source and expenditures by PHC service and management service ; and a "what-if" analysis of the effect of changes in the ten factors on future revenues and expenditures.
<input type="checkbox"/>	Level 3: A detailed analysis of revenues by source and expenditures by PHC service and management service taking into account changes in target population size and target group KAP (coverage) ; and a "what-if" analysis of the effect of changes in the ten factors on future revenues and expenditures.



assessment. The one on the **right** summarises the data you would need for different levels of financial assessment.

You will need to provide some minimal information, summary estimates, on the indicators for each of the ten sustainability factors. For some factors, such as revenues and expenditures, you will need to provide more detail. As the chart shows, the amount of detail required increases with each level.

Strategic assessment				Financial assessment			
Sustainability factors	Level 1	Level 2	Level 3	Sustainability factors	Level 1	Level 2	Level 3
Population size	•	•	X	Population size	•	•	X
Target group KAP	•	•	X	Target group KAP	•	•	X
PHC service quality	•	X	X	PHC service quality	•	X	X
Management support	•	X	X	Management support	•	X	X
Political commitment	•	•	•	Political commitment	•	•	•
Personnel resources	•	•	•	Personnel resources	•	•	•
Revenues	•	•	•	Revenues	X ¹	X ¹	X ¹
Expenditures	•	•	•	Expenditures	X ²	X ³	X ³
Environmental factors	•	•	•	Environmental factors	•	•	•
• Summary estimates only				• Summary estimates only			
X Detailed estimates				X Detailed estimates			
N.B. Don't forget that you can mix levels of analysis. You can do a Level 3 Strategic assessment and a Level 1 Financial assessment, for example.				1 Revenues by source 2 Expenditures by general ledger item 3 Expenditures by PHC service and management activity			

Step 4: Conduct strategic assessment

Although the "bottom line" in any sustainability strategy is money - bringing in enough revenues to meet expenditures - money is not the only consideration. As noted earlier, sustainability can be profoundly influenced by managerial and political factors, some of which are discussed below. If one or more of these is a threat, then it will have to be removed or "neutralised" to make the sustainability strategy successful. Factors can also be positive and enhance sustainability. Then they can be seen as opportunities to expand or improve the programme.

This module identifies ten sustainability factors, which are summarised as follows:

Assess strategy



- **Target population size:** The degree to which the size, composition and distribution of your programme's target populations are likely to change in the future. Rapid and large increases or decreases in the size of the target populations can be threats to sustainability.
- **Target group knowledge, attitudes and practice (coverage):** The degree to which the principal target groups of the project are and will continue to be **knowledgeable** about PHC services and their benefits; **motivated** to utilise those services; and, actually **practice** healthful habits, including utilising PHC services and institutionalising healthful behavior at home. Low knowledge, poor motivation and poor health habits are threats to sustainability. High levels of KAP can reduce the need for continued services.
- **PHC service quality:** The degree to which high quality PHC products and services can continue to be provided in the future. Low quality and/or the absence of key services can be a threat, while high quality may increase demand for services and support of them.
- **Management support:** The degree to which important PHC project management activities, such as planning and supervision, can be maintained at current or increased levels of effectiveness and efficiency. Weak or missing support services can be a threat to sustainability.
- **Organisational capacity:** The degree to which strong parent and collaborating PHC organisation(s) can be maintained in the future. Even well-managed and financed programmes may collapse if implementing organisations are weak or inefficient. Well-managed organisations contribute greatly to the sustainability of individual programmes. Community organisations may be particularly critical for the sustainability of certain programmes.
- **Political commitment:** The degree to which influential individuals, groups and organisations will support the project in the future. High, broad-based commitment is conducive to sustainability; low, narrow-based commitment is a threat.
- **Personnel resources:** The degree to which skilled management, technical and field staff can be retained in the future. Loss of key staff is a threat to sustainability. Retention of key staff can ensure continuity and stimulate interest in expansion and growth.
- **Programme revenues:** The degree to which needed monetary income will be maintained in the future. Inadequate income is obviously a threat. (Note that the strategic assessment of this factor is limited to a broad assessment of revenue trends, threats and opportunities in the future. Detailed assessment of revenue amounts and sources is left to the financial assessment.)
- **Programme expenditures:** The degree to which costs can be controlled in the future. High programme costs are a threat. As with Revenues, the strategic assessment concentrates on the broad picture. Detailed analysis would be done in the financial assessment.
- **Environment:** The degree to which changes in such contextual factors as weather, the economy, political stability, transportation systems, etc., are likely to change in the future. Small and gradual changes can usually be absorbed, but large and sudden changes can have a significant positive or negative effect on sustainability.



Appendix A contains checklists for each of the ten sustainability factors. It can help you define that factor; identify key indicators to assess whether it is a threat to (or opportunity to enhance) sustainability; identify several strategies for coping with the threat; and, estimate the financial implications of the strategy. An excerpt from one of these checklists is shown on the following page.

Gather data

**Collect essential
data**

In some cases, you may already know enough about these factors to move to the next step. Sometimes you will need to gather additional information on at least a few of the factors. Hopefully, most of the data you need will already be available from a recent census, surveys, baseline assessments, your household registration system, clinic records, government estimates of morbidity, mortality and coverage, financial reports, and ad hoc studies.

Formally gathered data may need to be supplemented from informal sources, especially with regard to organisational capacity, political commitment and other factors that are not easily quantified. You probably have a variety of informal "experts" that you can call on for this information. These "key informants", as they are called, can include CHWs, politicians, community leaders, your own staff, consultants, university specialists, programme clients, and any others who have specific and credible knowledge about one of the factors. You may want to gather a cross-section of such key informants together to help you brainstorm sustainability factors and then assess their likely affect on your programme.

Do not underestimate the value of informed opinion. It can be very accurate, especially when presented in a diverse group. It is also a fast and inexpensive way to gather needed information. You do not need precise estimates for these factors, though, of course, your projections will be more accurate if your data are precise. Remember that the objective of this exercise is to conduct a **general assessment** of sustainability and to develop a **general strategy** for achieving sustainability. You don't need exact figures for that, only reasonable estimates. Once you have an acceptable strategy, then you can prepare a detailed sustainability plan.



EXCERPT FROM CHECKLIST ON TARGET GROUP KAP (COVERAGE)

Target group knowledge, attitudes and practice - (coverage): The degree to which the principal target groups of the project are and will continue to be **knowledgeable** about PHC services and their benefits; **motivated** to utilise these services; and actually **practice** healthful habits, including utilising PHC services and institutionalising healthful behaviour at home. Low knowledge, poor motivation and poor health habits are threats to sustainability. High levels of KAP can reduce the need for continued services.

Key indicators: For the PHC programme overall and/or for each PHC Service. Also see Modules 2 and 5 for extensive lists of KAP indicators for each PHC service.

1. Is knowledge about PHC adequate to sustain

- demand for services?
- correct PHC practices at home?

2. Is motivation adequate to sustain

- demand for services?
- correct PHC practices at home?

3. Is there adequate

- demand for services?
- correct PHC practices at home?

Strategies: For each problem or opportunity, identify a strategy. Some examples:

1. Adapt the programme to traditional practices
2. Link low-demand with high-demand services
3. Emphasise healthful changes that have obvious benefits
4. Plan continued, but gradually reduced support for behavioural changes
5. Educate all family members, not just mothers, about PHC
6. Educate community and political leaders about PHC
7. Launch a public relations or advertising campaign
8. Sponsor a PHC Week, PHC Baby Contest, or similar event to attract public attention to PHC
9. Increase home visits to those who aren't participating in PHC
10. Use satisfied mothers to recruit others to PHC
11. Set up a 10-household PHC Communicator system
12. Involve school children in promoting PHC at home

Financial implications: For each strategy selected, determine what are, if any, the financial implications for the project.

1. Will costs increase? For which items, and approximately how much?
 - Personnel
 - Travel/per diem
 - Other
 - Equipment
 - Supplies
2. Will these be: one-time, recurrent, or compounded costs?
3. Will revenues increase? From what source(s) and by how much?

If you do not have all of the required data and you don't feel comfortable about making estimates, you may want to take some time to collect the needed data. Some of the other PHC MAP modules may be of help to you. Module 8 (Cost analysis) can help you collect and classify data for the



revenue and expenditure factors. Modules 6 and 7 can help you assess PHC service quality and management activities. Module 5 can help you select additional indicators for all of the factors. Modules 2 and 4 can help you gather important information on target group KAP, coverage, and morbidity and mortality priorities.

Based on the above information, you should now determine which sustainability factors are **threats**, which present **opportunities**, and which are unlikely to have any effect. You should also make rough judgements regarding their importance. The following excerpt from one of the worksheets in Appendix B shows how each factor might be assessed using one or more (-) to indicate a threat, (+) to indicate an opportunity, or (0) to indicate it is neutral.

**Determine
threats and
opportunities**

Threat/opportunity factor:	Description	Effect
Target population size; Threat: annually projected	In-migration of 2%	- -
Target group KAP (coverage); Threat: needs education, counselling	New clientele	-
PHC service quality; Opportunity:	Improving steadily	+

The first factor reveals a threat to sustainability. The programme's target population will increase by two percent per year. This will increase the burden on the programme to provide services. The second factor also reveals a threat. New clients are less knowledgeable about PHC than current ones and will need extra IEC and counselling if they are to adopt healthful practices. The third factor reveals a positive indicator. PHC service quality has been improving, perhaps due to management attention to staff training among other things. Improved quality should mean that there will be fewer programme-induced side-effects, fewer unnecessary return visits, greater demand, greater consistency of use of PHC, and so forth. This could have a positive effect on coverage and reduce costs as well.

Working as a group, the management team should review each factor, calling upon data, experience and brainstorming to identify those that pose threats and those that present opportunities. Remember that the analysis should keep in mind the sustainability objectives. You are attempting to



identify threats to the achievement of those objectives, and opportunities that might make it easier to achieve them, as well.

Step 5: Identify strategies for addressing threats and opportunities

Next you identify strategies to deal with serious threats and to take advantage of opportunities. In reality, this step will probably be done in conjunction with Step 4, but you may want to identify all of the threats first and then develop strategies to deal with the overall problems that you identify. Strategy development is one of those activities that lends itself to group work. There are also several simple tools that you can use to stimulate ideas. Three of them are listed below. Consult the Problem-solving guide for others.

When a strategy has been selected, it is relatively easy to determine if it has financial implications, and if so, to estimate their costs for the financial assessment. This is the same procedure that managers would follow in costing out any other PHC project activity. It will be important to distinguish between one-time, recurrent and compounded costs (discussed in Step 6 and in Appendix B). And do not forget revenues. Some strategies may earn money for the project.

**Revise, refine
strategy**



HOW TO SELECT STRATEGIES

- **Understand and attack the root problem, not the symptoms** Ask "Why" at least five times. Example:

The community doesn't support the programme.	Why?
The community leaders are against it.	Why?
They think it's being imposed on them.	Why?
Because they don't understand the philosophy of PHC.	Why?
Because it hasn't been made clear to them.	Why?
Because no one has discussed it with them.	

Although the "why" questions could go on forever, at some point the cause of the problem is made clear, and the solution is fairly obvious. In this example, the likely solution would be for senior project staff to meet with the community leaders to explain the programme's goals, philosophy, procedures, the community role, and to solicit their involvement.

- **Review lists of solutions that have worked before.** The literature on PHC and related areas (community development, family planning, agriculture extension) is full of examples of problems that others have encountered and solutions they have tried. These "lessons learned" are invaluable for managers who are seeking solutions. Consult the PHC MAP *Problem-solving guide* for some ideas.
- **Brainstorm solutions.** Gather the staff, CHWs, community leaders and others together to brainstorm solutions to significant problems. For example, here are some ideas for making PHC services more efficient:
 - Reduce the frequency of household visits to low-risk cases
 - Limit services to high and medium-risk cases
 - Conduct a time analysis to find ways to reduce unproductive time
 - Reorganise home visit and clinic session schedules to save time, travel and avoid duplication
 - Provide incentives to staff to become more efficient
 - Hire contract staff to provide evening and weekend services

The following worksheet (taken from Appendix B) illustrates how each of the ten sustainability factors can be analysed in terms of threats/opportunities, strategies, and financial implications. For example, the target group is expected to increase significantly due to in-migration, and that is a significant threat (-). The strategy for dealing with it is to increase services, which will, of course, raise costs. The strategy for paying for this is to increase revenues through increasing service fees; soliciting more contributions; and reducing service costs by increasing community in-kind contributions.

The "0" in the "Effect" column on the right indicates that this would neutralise the threat. The entries in the Financial implications columns indicate that revenues would be in-





Table 2: Sustainability factors worksheet

LEVEL 1			File MOD9_SA1.WQ1 or MOD9_SA1.WK1		FINANCIAL IMPLICATIONS					
Classify each factor, identify strategies where appropriate, estimate financial implications					Revenues			Expenditures		
Threat/opportunity factor; description	Effect	Strategy	Effect	1-Time Rev.	Rcrnt. Rev.	Cmpnd. Rev.	1-Time Costs	Rcrnt. Costs	Cmpnd. Costs	
1. Target group size. Threat: In-migration of 5% annually projected	--	Increase services. Raise revenues through increased fees, contributions. Reduce costs via community in-kind contributions	0			10%			+5%	
2. Target group KAP (coverage). Threat: New clientele need education and counseling	-	Add special IEC sessions for new IEC clientele	0						+2%	
3. PHC service quality. Opportunity: Improving steadily	+	TQM already installed. Quality should improve; costs may decrease	+							
4. Management support. Opportunity: Strong and improving	+	Expect increase in efficiency. Should lower costs later	+							
5. Organisational capacity. Opportunity: Strong organisation	+	No strategy at present. Could expand into other areas	+							
6. Political commitment. Threat: Lack of community support	-	Hold 2-3 education/PR sessions in each community	0					+1%		
7. Personnel resources. Threat: May lose key staff as donor support ends	-	Develop improved compensation package	0					+3%		
8. Revenues. Threat: Losing some donor support in 1993	-	Develop alternative sources of funds: Fees, fund-raising, training, contributions. Recurrent: Fees 5%, grants 20%, outside income 200% Compounded: Contrib 10%; govt 5%, grants 5%, outside 20%	+		+5% +20% +200%	+10% +5% +20%				
9. Expenditures. Threat: Inflation of 3% annually. Other line item costs increasing, some decreasing	-	Increase revenues > 3% (see revenues). Recurrent: Indirect costs - 10%; in-kind contrib +10% Compound: Personnel +2%; travel +2%; supplies -3%; ODC -5%; in-kind +5%	+		-10% +10%	+2% +2% -3% -5% +3% +5%				
10. Environment. Neutral: No changes expected	0		0							

Entries cannot be made in shaded cells in the computer program.

creased one percent per year (as a result of increased service fees), and costs would increase some five percent annually. The additional revenues needed to offset the increased costs would be raised through other means, which are summarised in the "Revenues" row.

See Appendix B for more detailed instructions on using the worksheets.

Step 6: Conduct financial assessment

Make 5-year projections. A Financial assessment of sustainability focuses on projections of future revenues and expenditures. There are many ways to make such projections. The simplest is to use the current year's figures for each of the next five years. The most complex is to do a strategic assessment first and then compute the revenues and expenditures for various scenarios.

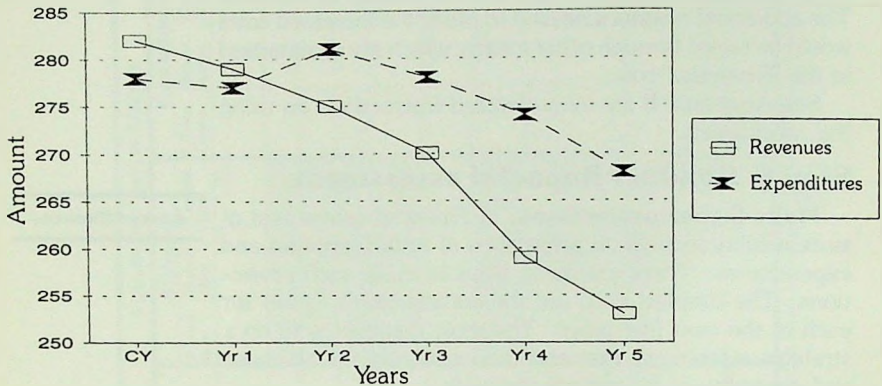
The following example, uses current year (CY) revenue and expenditure figures to make projections for the next five years. The line items, general ledger account lines, are

Assess finances

Table 3: Initial projections of revenues and expenditures (in '000)

3.1 Revenues	CY	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Total
Fees	17	18	19	20	21	23	101
Contributions	22	23	24	25	26	28	126
Govt. subsidies	21	20	25	23	25	25	118
Grants/contract	220	215	205	200	185	175	980
Outside income	2	3	2	2	2	2	11
Total	282	279	275	270	259	253	1,336
3.2 Expenditures	CY	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Total
Personnel	143	148	155	155	151	150	759
Travel/Per diem	35	38	40	35	38	35	186
Supplies	29	28	32	28	27	26	141
Equipment	45	35	25	30	27	25	142
Other direct costs	10	12	13	14	15	16	70
Indirect costs	16	16	16	16	16	16	80
Total	278	277	281	278	274	268	1,378
3.3 Summary	CY	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Total
Revenues	282	279	275	270	259	253	1,366
Expenditures	278	277	281	278	274	268	1,378
Balance	4	2	-6	-8	-15	-15	-42



Figure 1: Initial projections of revenues and expenditures (5 years)

shown in Table 1. Obviously, these figures should be as realistic as possible if they are going to be of any use.

The above graph, Figure 1, illustrates the relationship between the revenues and expenditures in this table. It also shows the "break-even" point, where costs and revenues are equal. Prior to this point the programme was sustainable. Subsequent to this point it isn't, as costs are expected to exceed revenues. This concept of a "break-even point," which is commonly used in business, is a useful summary measure of financial sustainability.

Examine the results; identify options for increasing revenues and/or reducing costs. If the initial estimates show that the programme will be sustainable, then further analysis is probably not needed. If it shows, as this example does, that expenditures are going to exceed revenues significantly, then the analysis should continue. Basically, this involves looking for ways to "balance the budget." The manager should examine as many options as necessary to reduce costs and increase revenues. Some suggestions are shown in the accompanying box.



CHECKLIST OF OPTIONS FOR INCREASING REVENUES AND DECREASING COSTS

Increasing revenues

- Increase service fees
- Add non-PHC products that are in demand by the clientele
- Start community funds to offset costs
- Solicit government contributions
- Develop a fund-raising campaign/strategy
- Submit proposals for grants and contracts for training, research, demonstrations
- Add or upgrade services to attract a higher-income clientele
- Add a proven income-generating activity to the project
- Stratify services for different target groups, based on willingness and ability to pay

Decreasing costs

- Increase in-kind contributions:
 - Traditional (labour, transportation, supplies, etc.)
 - Non-traditional (telephone, utilities, uniforms, food, school children to assist CHWs, etc.)
- Keep inventories low, do not overstock.
- Delay/postpone capital expenditures, expansion plans
- Transfer responsibility for selected services, tasks, staff, vehicle maintenance, etc., to others: Ministry of Health, other NGOs, and community organisations.
- Close unaffordable facilities
- Rent out unused facility space
- Revise objectives and service strategies to fit new donor interests
- Reduce or eliminate high-cost activities
- Combine staff roles
- Identify low-cost substitutes for supplies, equipment, etc., especially expensive imported items
- Use local, rather than international consultants

You can make the adjustments to the initial table by hand, using a hand calculator. For example, if you have identified a way to increase revenues by five percent each year, just adjust the figures in the revenue columns of your projections.

Revenues and expenditures can change in three major ways. There can be one-time changes, recurrent changes, or compounded changes. The worksheets allow you to specify which type of change you anticipate.



- **One-time:** The change occurs only once and is neither continued nor imposed again.
Revenue: A one-time assessment of all households.
Expenditure: A one-time bonus paid to all staff.
- **Recurrent:** The change is made permanent. It is continued.
Revenue: Household assessments are levied each year, but the amount of the assessment stays the same.
Expenditure: Staff are given a five percent salary increase which is continued for as long as they stay in the programme. It is neither increased nor decreased each year.
- **Compounded:** The change increases or decreases over time by a fixed amount or percentage.
Revenue: Household assessments go up an additional five percent each year.
Expenditure: Staff salaries are raised five percent each year.

You can enter these estimated changes in a "what-if" analysis table, such as the one shown below and then make your adjustments to your financial projections. If you use the computer programs that come with this module, you can examine a variety of different economic assumptions very quickly to see their effects on revenues and expenditures. You can see, for example, **WHAT** would happen **IF** fees were increased by 6% annually (or by any other percentage). You can see what would happen if personnel expenses increased, or decreased, if travel costs changed, and so forth. The results would be shown in another table (similar to Table 3 above), computed automatically. You can "play" with these assumptions, changing them over and over. Obviously, these changes have to be realistic. The changes can continue to be made until an acceptable break-even point is reached, at which point the programme reaches sustainability.



What-if analysis table: Financial factors

Revenue categories	1-Time revenue	Recrnt. revenue	Cmpnd. revenue
Fees		5.0%	
Contributions			10.0%
Govt. subsidies			5.0%
Grants/contracts		20.0%	5.0%
Outside income		200.0%	20.0%
Other			
Other			
Expenditures categories	1-Time costs	Recrnt. costs	Cmpnd. costs
Personnel			2.0%
Travel/per diem			2.0%
Supplies			-3.0%
Equipment			
Other direct costs			-5.0%
Indirect costs		-10.0%	
Other			
Other			
Other			
Other factors affecting expenditures			
Inflation	X	X	3.0%
In-kind contributions		10.0%	5.0%

A(+) increase revenues
A(-) decrease revenues

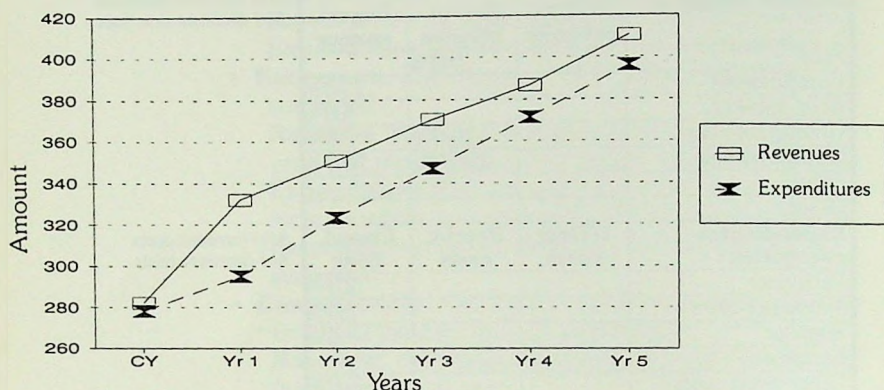
A(+) increase costs
A(-) decrease costs

A(+) increase all costs
A(-) decrease all costs

In our example, the manager is trying to respond to an expected increase in the demand for services by expanding PHC services. Obviously, this will increase costs. Personnel, travel and other direct costs are expected to increase annually by 2-5%. Inflation will increase all costs by 3% annually. Some savings will be made in supplies. They will decrease 3% annually. The increases in costs will be offset by increasing revenues from five sources: A five percent increase in service fees; and, annual increases in contributions, government subsidies, grants/contracts and outside income. A key feature of the strategy is a large annual increase in in-kind contributions from communities. This will help the project expand services without hiring more staff and in other ways increasing costs. If this strategy can be successfully implemented, it will enable the project to remain sustainable while expanding services and cutting costs.



Figure 2: Adjusted projections for revenues and expenditures (5 years)



**Develop strategy;
project costs and
revenues**

Figure 2 shows the dramatic change in revenue and expenditure projections that this strategy will produce.

Although the strategic and financial assessments can be done independently, they should be linked. We recommend that you do the Strategic assessment first and then prepare your financial projections and assumptions to fit that strategy. You may find that you have to revise parts of the strategy to achieve financial sustainability. If so, revise the strategy accordingly.

The computer programmes for Levels 1-3 include an option that lets you link the strategic and financial assessments directly. To do this you first estimate the financial implications of each part of your strategy. You enter these estimates to the right of your worksheet (Table 2). Then you transfer those estimates to the "what-if" analysis table (Table 4). You can then change those assumptions to see the effect on overall financial sustainability. See Appendix B for examples and instructions.



Table 4: What-if analysis worksheet

LEVEL 1 WORKSHEET				MOD9L1.WQ1 or MOD9L1.WK1		
Enter projected annual % increase (+) or decrease (-). See results in Table 5.						
Non-financial factors (See notes below)	1-Time rev.	Rcrnt. rev.	Compnd. rev.	1-Time costs	Rcrnt. costs	Compnd. costs
Target population size			1.0%			5.0%
Target group KAP (coverage)	X	X	X			
PHC service quality	X	X	X			
Management support	X	X	X			
Organisational capacity	X	X	X			
Political commitment					1.0%	
Personnel resources	X	X	X		3.0%	
Environment						

Total pop size: A(+) in revenues increases fees; A(+) in expenditures increases all costs
 Political commitment: A(+) increases all revenue; A(+) in expenditures increases all costs
 Environment: A(+) increases all revenues; A(+) in expenditures increases all costs
 All other factors: No effect on revenues; A(+) in expenditures increases all costs

By this time you should have your basic analysis completed. All of your basic assumptions, strategies, projected expenditures and revenues should have been entered into worksheets, or the computer program, and the first calculations made.

If the projections are satisfactory, you can stop. If they are not, you will want to experiment with changes in one or more of the assumptions until you arrive at an acceptable solution. To make changes in the strategic assessment, just enter your new estimates. This is a "paper and pencil" exercise, very "low-tech." Make sure you have a group help you with this reassessment, however. The results are more likely to be closer to reality and acceptable if a number of knowledgeable people participate in the analysis.

Changes in the financial assessment can be made most easily by using the computer program. Just enter the new revenue, expenditure and/or assumption figures in the appropriate template to see the results. The calculations can be done by hand, but as we have said before, that is a cumbersome procedure. If you use the computer program, the calculations will be made automatically and shown in an output table. See Appendix B for examples of this "what-if" analysis for each level.



Step 7: Select a strategy and develop an action plan

Strategic action plan

Manipulation of the variables and assumptions should eventually lead to an "optimal" strategy. This is one that will produce the best results with the funds available, given all of the constraints that the project faces.

That strategy should be written down. A general summary might look as follows:

Assumptions: A significant amount of in-migration is expected over the next several years. New clients will need additional counselling if PHC coverage is to be maintained. Community support for the programme is not strong enough. Some donor support will be lost in 1993, and this could affect our ability to retain key staff. Inflation is expected to be mild, but this will also affect costs.

A possible strategy: Clearly, services will have to be expanded to meet expected increases in demand, but that will raise costs. New revenue sources will be sought (fund-raising, raising service fees, seeking local contributions, offering training in PHC management for a fee). An important part of the strategy will be to raise community involvement in providing PHC services. This will enable the programme to expand services without increasing staff and other associated costs.

All of the key assumptions should be included in a more detailed documentation to make sure that they are not forgotten or overlooked.

Finally, an action plan should be developed to make sure that the sustainability strategy is implemented. This will often include two actions. First, a detailed plan needs to be developed. That plan can be developed as part of the normal planning strategy, but it should incorporate the assumptions made in the strategy.

Second, the staff, management, directors, etc., need to build sustainability thinking and action into their day-to-day work. Everyone can and should contribute. Managers and policy-makers are the likely ones to develop political commitment, contact other agencies for funds, negotiate with other providers to take over unsustainable project tasks, and develop new ideas for increasing revenues.



Line staff can help by identifying and implementing ways to reduce costs, increase efficiency, and solicit in-kind contributions from local organisations and communities.

It would also be prudent to review the sustainability strategy and plan each year, both to make sure that it is still realistic, and to update it, and possibly extend it beyond the five-year projection period.

Turn to Appendices A and B for more details. Appendix A contains checklists for assessing each of the 10 Sustainability factors. Appendix B contains instructions for carrying out each level of analysis. The computer files you need for Appendix B are on the accompanying disk. Blank worksheets can be found in Appendix C.



Appendix A: Sustainability factors, indicators and strategies

This appendix defines ten common factors that affect sustainability. Its purpose is to provide you with checklists that can help you identify and assess factors that could be threats to sustainability, and then work out a strategy for dealing with each threat. Each factor is presented on a separate page and follows a standard format:

- What the factor is
- Why it is important and indicators for assessing the factor
- Strategies for dealing with it

There is also a standard suggestion for determining the financial implications of strategies that are selected to be implemented.

The ten sustainability factors:

See also:

- | | |
|---|----------|
| • Target population size, composition and distribution | Module 2 |
| • Target group knowledge, attitudes and practices (KAP) | Module 6 |
| • PHC service quality | Module 7 |
| • Management support | |
| • Organisational capacity | |
| • Political commitment | |
| • Personnel resources | |
| • Programme revenues | Module 8 |
| • Programme expenditures | Module 8 |
| • Environment | |

Module 2 can help you examine target group KAP in much more detail. It contains questionnaires that can be used to assess the knowledge, attitudes and practices (coverage) of the most common PHC target groups for the most common PHC services. The KAP indicators are also summarised in Module 5.

Modules 6 and 7 can help you assess each PHC service and each management support activity in much greater detail. The indicators in these modules are also summarised in Module 5 and cover the following components:



PHC services

Antenatal care
Tetanus toxoid
Delivery/postnatal care
Family planning
Breast feeding
Growth monitoring
Nutrition education
Child immunization
Acute respiratory infections
Diarrhoeal disease control
Oral rehydration therapy
Water, sanitation, hygiene
Malaria treatment
Tuberculosis
Child disabilities
Sexually-transmitted diseases
HIV/AIDS
Treatment of minor ailments

Management services

Planning
Training
Supervision
Personnel management
Financial management
Logistics
Information management
Community organisation

Finally, Module 8 can help you gather more information on two other factors: revenues and expenditures.



Target population size, composition, and distribution

What it is: The degree to which the size, composition and distribution of the target population is likely to change in the future. Rapid and large increases or decreases in the size of the target populations can be threats to sustainability.

Why it is important: When the general population increases or decreases, there is a corresponding change in the size of the PHC target groups in that population - women aged 15-49, children 0-2, 3-5 years, and so forth. A rapid or large increase can increase workload significantly, and this can lead to increased costs and/or a decline in service quality. A rapid or large decrease can reduce demand for services, which can affect revenues and political support for the project.

Key indicators: Are the sizes of the target groups likely to increase or decrease significantly (10%) over the next five years due to:

- | | |
|------------------------------|--|
| 1. Population growth | Natural increases due to birth and death rates. |
| 2. Migration | In-or-out migration |
| 3. Socio-economic status | Improvement or decline in the SES of target groups |
| 4. Change in catchment areas | Expansion or shrinkage of the project area |
| 5. Health needs | Emergence of new health priorities (AIDS) or decline of current priorities (TB). |

Strategies: For each problem or opportunity, identify a strategy. Some examples:

1. Concentrate services on selected geographic areas
2. Reduce coverage targets
3. Reduce services offered to keep coverage of remaining services high
4. Transfer services of population groups to other agencies or to the private sector
5. Strengthen family planning to reduce 2-yr old growth rates
6. Triage services to those most in need
7. Reduce outreach services
8. Enlist support of communities to handle outreach
9. Expand services to meet needs
10. Reclassify target groups (raise eligibility standards)
11. Develop collaborative arrangement with other providers to increase/expand services
12. Reduce frequency of services per person

Financial implications: For each strategy selected, determine what are (if any) the financial implications for the project.

1. Will costs increase?
For which items, and approximately how much?
 - Personnel
 - Travel/per diem
 - Other
 - Equipment
 - Supplies
2. Will these be: One-time, recurrent, or compounded costs?
3. Will revenues increase? From what source(s) and by how much?



Target group KAP

What it is: The degree to which the principal target groups of the project are and will continue to be knowledgeable about PHC services and their benefits; motivated to utilise those services; and actually practice healthful habits, including utilising PHC services and institutionalising healthful behaviour at home.

Why it is important: Mothers, in particular, need to know enough about PHC, and be motivated enough, to both demand essential services for themselves and their children, and to sustain proper health practices in their homes. If they do not, then the demand for PHC and the practice of PHC will be insufficient to improve health.

Key indicators: For the PHC programme overall and/or for each PHC service. Also see Modules 2 and 5 for extensive lists of KAP indicators for each PHC service.

1. Is knowledge about PHC adequate to sustain:

- demand for services?
- correct PHC practices at home?

2. Is motivation adequate to sustain:

- demand for services?
- correct PHC practices at home?

3. Is there adequate:

- demand for services?
- correct PHC practices at home?

Strategies: For each problem or opportunity, identify a strategy. Some examples:

1. Adapt the programme to traditional practices
2. Link low-demand with high-demand services
3. Emphasise healthful changes that have obvious benefits
4. Plan continued, but gradually reduced support for behavioural changes
5. Educate all family members, not just mothers, about PHC
6. Educate community and political leaders about PHC
7. Launch a public relations or advertising campaign
8. Sponsor a PHC Week, PHC Baby Contest, or similar event to attract public attention to PHC
9. Increase home visits to those who aren't participating in PHC
10. Use satisfied mothers to recruit others to PHC
11. Set up a 10-household PHC communicator system
12. Involve school children in promoting PHC at home

Financial implications: For each strategy selected, determine what are the financial implications, if any, for the project.

1. Will costs increase? For which items, and approximately how much?

- Personnel
- Travel/per diem
- Other
- Equipment
- Supplies

2. Will these be: One-time, recurrent, or compounded costs?

3. Will revenues increase? From what source(s) and by how much?



PHC service quality

What it is: The degree to which the project will provide products and services which meet technical standards and user expectations. Low quality products and services can be a threat

Why it is important: Low quality and/or the absence of any essential product or service discourages utilisation. Good quality attracts paying clients and encourages public confidence in and use of effective PHC interventions.

Key indicators: See Modules 5 and 6 for extensive lists of indicators for each PHC service.

- | | |
|------------------------|--|
| 1. Diagnosis | Do health workers (HW) adequately screen and accurately diagnose clients' conditions? |
| 2. Education | Do HWs provide correct and complete information about PHC services and products to clients? |
| 3. Treatment | Do HW follow treatment protocols correctly? |
| 4. Counselling | Do HW provide correct and complete advice to clients? |
| 5. Client satisfaction | Are project clients satisfied with the quality of services and products? |
| 6. Products | Do health facilities have appropriate and sufficient <ul style="list-style-type: none"> • Medical facilities, equipment and furnishings? • Medical supplies and drugs? • IEC materials? |

Strategies: For each problem or opportunity, identify a strategy. Some examples:

1. Concentrate resources on effective services so as to maintain minimum quality services
2. Clarify, communicate, and enforce quality standards
3. Decentralise problem-solving capacity and authority
4. Strengthen managerial support systems for PHC services
5. Increase client participation in routine program planning and evaluation
6. Provide continued access to technical ideas and professional education
7. Develop and institutionalise job aids
8. Provide continuing education and in-service training to staff to upgrade skills
9. Monitor inventories to ensure that products are sufficient and not out of date
10. Develop standards manuals for each PHC service
11. Set up a quality assurance team, involve client representatives
12. Conduct periodic spot checks of service delivery using standard checklists
13. Hold periodic meetings to share lessons learned and ideas about ways to improve quality

Financial implications: For each strategy selected, determine what are the financial implications, if any, for the project.

1. Will costs increase? For which items, and approximately how much?
 - Personnel
 - Travel/per diem
 - Other
 - Equipment
 - Supplies
2. Will these be one-time, recurrent, or compounded costs?
3. Will revenues increase? From what source(s) and by how much?



Management support

What it is: The degree to which important management support services (planning, supervision) will be maintained at current or increased levels of quality in the future. Weak or missing support services are threats.

Why it is important: WHO has identified good management as one of the critical elements of successful PHC programmes. When it is strong, the programme operates smoothly, effectively and efficiently. When management is weak the programme is weak and can eventually lose support.

Key indicators: See Modules 5 and 7 for extensive lists of indicators for assessing each management support activity.

- | | |
|------------------------|---|
| 1. Support services | Are all necessary management support services in place and likely to continue? |
| 2. Client satisfaction | Are employees satisfied with the quality of management support services? |
| 3. Resources | Does the project have sufficient and appropriate <ul style="list-style-type: none"> • Management personnel? • Supplies and equipment? • Information? |

Strategies: For each problem or opportunity, identify a strategy. Some examples:

1. Emphasise locally-available supplies, e.g., cereal-based ORT rather than ORS packets
2. Encourage appropriate private sector activities
3. Simplify the information system to collect only data that is used
4. Standardise equipment to reduce maintenance requirements
5. Conduct group, rather than individual supervision
6. Provide continuing education and training to management staff
7. Consider using computers to simplify routine administration and reporting
8. Set up a management quality assurance team to come up with ways to improve management support
9. Talk with health and field staff regularly about their needs and install procedures to meet them
10. Try exchange programmes with other projects to share experiences and learn from one another
11. Subscribe to and read management journals

Financial implications: For each strategy selected, determine what are the financial implications, if any, for the project.

1. Will costs increase? For which items, and approximately how much?

• Personnel	• Travel/per diem	• Other
• Equipment	• Supplies	
2. Will these be: One-time, recurrent, or compounded costs?
3. Will revenues increase? From what source(s) and by how much?



Organisational capacity

What it is: The degree to which strong collaborating and parent organisations will be maintained in the future. Weak organisations are a threat.

Why it is important: Most PHC programs are part of a larger organisation or collaborate with other agencies to provide PHC. If these organisations become weak and collapse, that jeopardises the program as well as the other collaborating agencies. Strong organisations can supplement one another's strengths and cover for their weaknesses.

Key indicators: For each collaborating or parent organisation (NGO, MOH, affiliate, etc.) assess the following:

- | | |
|--------------|--|
| 1. Finances | Are financial reserves adequate to continue core functions over the next five years? |
| 2. Structure | Does the organisation have a stable structure and management? |
| 3. Support | Does the organisation have broad-based support? |

Strategies: For each problem or opportunity, identify a strategy. Some examples:

1. Work with well-established organisations, rather than create parallel groups
2. Affiliate with private sector organisations when government is weak, and vice versa
3. Minimise burdens on new or weak organisations, including those at the community level
4. Strengthen technical links between local and external agencies
5. Train the organisation's staff
6. Hold periodic meetings to examine current and future trends and to reassign roles, if appropriate

Financial implications: For each strategy selected, determine what are, if any, the financial implications for the project.

1. Will costs increase? For which items, and approximately how much?
 - Personnel
 - Travel/per diem
 - Other
 - Equipment
 - Supplies
2. Will these be: One-time, recurrent, or compounded costs?
3. Will revenues increase? From what source(s) and by how much?



Political commitment

What it is: The degree to which important individuals, groups and organisations will support the programme in the future. High, broad-based commitment is conducive to sustainability; low, narrow-based commitment is a threat.

Why it is important: Support from influential people is essential to ensure that your programme is promoted, has a positive public image, is respected, recommended, and receives financial support to keep operating. Loss of such support can quickly result in isolation and decline.

Key indicators: For each important individual, group or organisation (community, political, religious, philanthropic, civic, government, the press, etc.) assess the following:

- | | |
|--------------|---|
| 1. Knowledge | Is their knowledge about the programme complete and accurate? |
| 2. Image | Is their image of the programme positive? |
| 3. Behaviour | Did they in the past, and will they in the future, <ul style="list-style-type: none"> • Speak publicly in favour of the programme? • Help to get favourable policies, rules, laws passed? • Contribute financially to the programme? |
| 4. Access | Do you have open access to this group? |

Strategies: For each problem or opportunity, identify a strategy. Some examples:

1. Drop unpopular components
2. Avoid activities that might create opposition among non-beneficiaries
3. Avoid unnecessary challenges to influential groups, especially landowners and the private sector
4. Reduce dependency on groups whose support is weak
5. Emphasise components which need limited outside support, such as household based PHC, low-maintenance water systems, community-managed services
6. Set up special promotional campaigns for opinion leaders: politicians, news reporters, religious leaders, etc.
7. Strengthen the MIS to measure and report programme achievements quickly to influential groups
8. Devote additional resources to community participation
9. Design the programme to emphasise highly popular components (e.g., curative care, services for influential populations, water supply)
10. Assist communities to express their needs to political leaders and donors
11. Involve influential groups from the start in programme planning and evaluation
12. Integrate new activities into established institutions and programmes
13. Invite the press to tour the programme, do a series on the programme and its clientele
14. Appoint influential leaders to the Board or an Advisory Committee

Financial implications: For each strategy selected, determine what are the financial implications, if any, for the project.

1. Will costs increase? For which items, and approximately how much?

• Personnel	• Travel/per diem	• Other
• Equipment	• Supplies	
2. Will these be: One-time, recurrent, or compounded costs?
3. Will revenues increase? From what source(s) and by how much?



Personnel resources

What it is: The degree to which skilled management, technical and field staff can be retained in the future. Loss of key staff is a threat to sustainability.

Why it is important: Staff are probably the most important resource a PHC programme has. They often account for 50-70% of the budget. It takes a long time to recruit, train and coach staff to do their jobs well. If skilled staff leave the programme this can affect the quality of services, morale of other staff, and costs. If a number of key staff leave at the same time, this can seriously threaten political support for the programme and the ability of the organisation to survive.

Key indicators: For all key staff, management, technical and field, assess the following:

- | | |
|--------------------|--|
| 1. Job performance | Is current job performance adequate or better? |
| 2. Skill level | Are job skills adequate or better? |
| 3. Turnover | Are staff staying in their jobs for a reasonable length of time? |
| 4. Morale | Is staff morale good or better? |

Strategies: For each problem or opportunity, identify a strategy. Some examples:

1. Provide staff with continuing education and in-service training to upgrade skills
2. Improve the compensation plan and benefits
3. Develop/improve career ladders, promotion opportunities
4. Replace volunteers with paid staff, or vice versa
5. Implement a staff incentive plan
6. Recognise achievement, special contributions, birthdays to boost morale
7. Meet with staff regularly to get feedback on their needs and take action
8. Delegate authority and demonstrate confidence in staff

Financial implications: For each strategy selected, determine what are the financial implications, if any, for the project.

1. Will costs increase? For which items, and approximately how much?
 - Personnel
 - Travel/per diem
 - Other
 - Equipment
 - Supplies
2. Will these be: One-time, recurrent, or compounded costs?
3. Will revenues increase? From what source(s) and by how much?



Programme revenues

What it is: The degree to which needed monetary income will be maintained in the future. Inadequate income is a threat to sustainability.

Why it is important: All organisations need to have enough money to pay staff, space, supplies and other expenses. If they do not, they will steadily deteriorate until they go out of business. On the other hand, organisations with surpluses can reinvest their funds to expand services, test new ideas, improve quality, etc.

Key indicators:

- | | |
|-------------|--|
| 1. Income | Is annual income adequate to cover expenditures this year and for the next 5 years? |
| 2. Reserves | Are there sufficient reserves to cover deficits over the next 5 years? |
| 3. Sources | Are the sources of income stable, broad and likely to continue for the next 5 years? |

Strategies: For each problem or opportunity, identify a strategy. Some examples:

1. Set up a membership and patron system to raise funds from supporters
2. Increase service fees
3. Add non-PHC products that are in demand by the clientele
4. Start community funds to offset costs
5. Solicit government contributions
6. Develop a fund-raising campaign/strategy
7. Submit proposals for grants and contracts for training, research, demonstrations
8. Rent out unused facility space
9. Revise objectives and service strategies to fit new donor interests
10. Add or upgrade services to attract a higher-income clientele, use the profit to cross-subsidise services for the lower-income clientele.
11. Add a proven income-generating activity to the project
12. Stratify services for different target groups, based on willingness and ability to pay

Financial implications: For each strategy selected, determine what are the financial implications, if any, for the project.

1. Will costs increase? For which items, and approximately how much?
 - Personnel
 - Travel/per diem
 - Other
 - Equipment
 - Supplies
2. Will these be: One-time, recurrent, or compounded costs?
3. Will revenues increase? From what source(s) and by how much?



Programme expenditures

What it is: The degree to which costs can be controlled in the future. High costs, especially if they exceed revenues, are a threat to sustainability.

Why it is important: Costs have to be kept lower than revenues, otherwise the organisation will operate at a loss and eventually go out of business. It may be able to continue by using reserves or selling assets, but only for a short period. If costs are kept low, then the surpluses can be held in reserve for bad times or used to expand and upgrade services.

Key indicators:

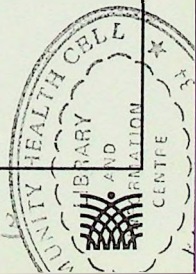
1. Expenditures
 - Are annual monetary expenditures less than annual revenues this year, and for the next five year projections?
2. Stability
 - Are expenses stable and likely to stay at the same levels over five years?
3. Line items
 - Are all lines within budget; are any much higher or lower than expected?

Strategies: For each problem or opportunity, identify a strategy. Some examples:

1. Negotiate discounts on volume purchases
2. Buy direct from the manufacturer or wholesaler to reduce costs
3. Pay bills on time to avoid penalties and take advantage of discounts
4. Relocate project offices and clinics to lower-cost areas
5. Increase in-kind contributions
 - Traditional (labour, transportation, supplies, etc.)
 - Non-traditional (telephone, utilities, uniforms, food, etc., school children, girl scouts to assist CHWs)
6. Keep inventories low, do not overstock
7. Delay/postpone capital expenditures, expansion plans
10. Transfer responsibility for selected services, tasks, staff vehicles maintenance, to others, e.g., Ministry of Health, other NGOs, and community organisations
11. Close unaffordable facilities
12. Reduce or eliminate high-cost activities
13. Combine staff roles
14. Identify low-cost substitutes for supplies, equipment, especially costly imported items
15. Use local, rather than international consultants
16. Provide incentives to staff to become more efficient
17. Hire contract staff to provide evening and weekend services
18. Reduce the frequency of household visits to low-risk cases
19. Limit services to high and medium-risk cases
20. Conduct a time analysis to find ways to reduce unproductive time
21. Reorganise home visit and clinic session schedules to save time, travel and duplication

Financial implications: For each strategy selected, determine what are the financial implications, if any, for the project.

1. Will costs increase? For which items, and approximately how much?
 - Personnel
 - Travel/per diem
 - Other
 - Equipment
 - Supplies
2. Will these be: One-time, recurrent, or compounded costs?
3. Will revenues increase? From what source(s) and by how much?



Environment

What it is: The degree to which changes in such contextual factors as weather, the economy, political stability, transportation systems, etc. are likely to change in the future.

Why it is important: Programmes can be greatly affected by factors beyond their control. Economic decline can reduce local funding sources, while growth can increase both utilisation and the potential for user payments. Political instability can cause rapid staff turnover or loss of community support.

Key indicators:

- | | |
|------------------------|--|
| 1. Economy | Is the programme heavily dependent on the local economy, through user payments, or other fluctuating revenue source? |
| 2. Political stability | Are any major political changes likely to affect government commitment to primary health care or to specific activities? |
| 3. Transportation | Will changes in geographic accessibility affect use of programme services? |

Strategies: For each potential problem or opportunity, identify a strategy. Some examples:

1. Seek broad public and leadership support independent of political parties
2. Diversify financial support to reduce dependency on any specialised portion of the economy
3. Make allowances for future changes in use due to transport improvements

Financial implications: For each strategy selected, determine what are the financial implications, if any, for the project.

1. Will costs increase? For which items, and approximately how much?
 - Personnel
 - Travel/per diem
 - Other
 - Equipment
 - Supplies
2. Will these be: One-time, recurrent, or compounded costs?
3. Will revenues increase? From what source(s) and by how much?



Appendix B: Worksheets and spreadsheet templates

This appendix is organised into three sections, one for each level of analysis. Each section consists of four tables, or worksheets. You list your principal PHC target groups, PHC services and coverage objectives in Table 1. This is a summary of what you want to sustain. Later on in the analysis, you may decide to change one or more of these objectives.

Strategic assessment

In Table 2 you summarise the results of your analysis of the sustainability factors. First, you determine whether each one is a threat, opportunity, or neutral, and then you estimate the magnitude of the effect of that factor on your programme, positive or negative.

You can use any rating system you want to assess the effects. The following is one suggestion:

Threat (negative)

- Life-threatening, must overcome
- Serious and significant
- Minor, but should be dealt with
- 0 Neutral: neither a threat nor an opportunity
- + Minor advantage, opportunity to pursue
- ++ Significant opportunity, very advantageous
- +++ Golden opportunity, must follow up

Opportunity (positive)

Next, you devise one or more strategies to deal with each factor and reassess the net effect after implementing the strategies. Ideally, your overall sustainability strategy should neutralise the threats and take advantages of opportunities. You should then summarise your strategy in writing and develop an action plan to implement it.

If you are doing a Level 1 analysis, all ten factors are on one worksheet (Table 2). The Level 2 worksheet has two worksheets. The first contains eight of the factors, and you use the second to list your principal PHC and management support services. You then do an assessment of the strengths and weaknesses of each service.

Level 3 also has two worksheets. The first contains six factors. You use the second to list your principal services, just as in Level 2. But in addition to assessing the threats and opportunities, you estimate the changes that are likely to occur in target population size and coverage - for each service.

You need to fill out the Worksheet for Selecting Target Groups to make the population and coverage estimates in the Level 3 analysis.

If you are only doing a strategic assessment, you do not need to use the remaining tables. They are for the financial assessment.



Financial assessment

Table 2 has an optional section: six columns to the right that you can use to estimate the financial implications of each of your strategies. Use these if you are going to do a financial assessment. In general, you need to determine whether there are any costs, or possible effects on revenues, of each strategy. If a factor is neutral, or if you are not going to do anything about a threat or opportunity, then there should be no financial implication. But if you are going to do something, there could be a cost associated with it. A strategy could increase or decrease costs. It could also increase or decrease revenues. Here are some examples:

- **Low political commitment:** Assume that the strategy is to do intensive lobbying of legislators and community leaders to build up support. If this can be done by members of the programme's board of directors, then there may be little or no additional cost to the programme. However, if another staff person needs to be hired to work with the community leaders and to contact legislators, then this would increase costs (salary, travel, office space, etc.).
- **Target group KAP (coverage) low:** Health status could be badly affected if mothers do not bring their children for immunization, pregnant women do not enroll in ANC, and couples do not space their children. Assume that the strategy is to increase the frequency of health education and counseling contacts with mothers. This will require additional CHWs, supervisors, IEC materials, and so forth.
- **PHC service quality is improving:** Assume that there has been an effort to instill principles of "Total Quality Management" in the staff, and that it is having an effect. The strategy might be to continue TQM training (which would have a cost: consultants, staff time), but the expected benefits are: better services, that will attract more middle-class clients who will be willing to pay for services; and more efficient services as staff learn to solve problems themselves, which will reduce costs.

Make your estimates of financial implications in percentages. For example, an increase in the size of the target group by 5%, would increase costs by about the same amount. An increase in service fees of 10% would increase revenues. An increase in the use of community volunteers might reduce personnel costs by 15%.

Finally, you need to decide whether the change in revenues or expenditures will be a one-time only occurrence, it will be recurrent, or it will continue to change (compounded).

- **One-time:** the change occurs only once and is neither continued nor imposed again.
Revenue: a one-time assessment of all households
Expenditure: a one-time bonus paid to all staff
- **Recurrent:** the change is made permanent. It is continued.
Revenue: household assessments are levied each year, but the amount of the assessment stays the same.
Expenditure: staff are given a 5 percent salary increase which is continued for as long as they stay in the programme. It is neither increased nor decreased each year.
- **Compounded:** the change increases or decreases over time by a fixed amount or percentage.
Revenue: household assessments go up an additional 5 percent each year.
Expenditure: staff salaries are raised 5 percent each year.

Enter these estimates in the appropriate columns on the right side of Table 2. Later these will be transferred to the "what-if" analysis table (Table 4).

But first you need to enter your financial data into Table 3. This is a five-year projection of revenues and expenditures. You should make your projections based on your current



experience, your general forecasts for the economy, and the financial implications of your sustainability strategy.

If you are using a computer, you can enter your current year figures into the computerised version of Table 3 and it will copy those figures to each of the next five years. You can make appropriate changes in the line items, or you can make them indirectly through the "what-if" analysis. The figures you enter into Table 3 should be your core budget estimates for the next five years.

The Level 1 worksheet is limited to general ledger items (GLI). For Levels 2 and 3 you will estimate the costs of each PHC and management service. There is a computerised worksheet that will make the initial estimates for you if you know the approximate percentage of the cost of each service.

Table 4, also computerised, is the "what-if" analysis table. You should enter the figures from the financial implications (Table 2) into the program. If your initial projections already took those implications into account, do not enter them again. Instead, use this table to see what would happen if you adjusted some of those assumptions.

The results of any changes you make will be displayed in Table 5. This will enable you to keep your original projections in Table 3 and to compare the effects of your changes on your financial sustainability.

Save your assumptions and the results (Tables 4 and 5) or print them out so that you can remember what you did.

Computer assumptions

If you use the computer program for the "what-if" analysis (Table 4), it may be important to you to know the assumptions built into the computer program's formulae. The figures you enter in each box increase or decrease revenues or expenditures by the amount you enter. For example, if you estimate that inflation will be 5% each year, the computer takes the expenditures for the previous year and increases them by five percent. It does the same for each subsequent year.

All of the assumptions are programmed to change expenditures or revenues by the same amount that you enter. You can make some adjustments by entering lower (or higher) percentages to take some of your qualifications into account. For example, if you do not think that it will cost you anything to increase coverage by 2% each year, then enter 0% in that box rather than +2%. If you estimate that it will cost much more than 10% to increase coverage by 10%, then enter a larger figure.

The following are brief explanations of the assumptions written into the computer program for each of the ten sustainability factors and two special variables (Inflation and In-kind contributions).

- **Target population size, composition and distribution**

Assumes that you will serve X% more (or fewer) people each year. This will increase (or decrease) all of your costs by X% because you will have to increase (or decrease) services. It will also increase (or decrease) one revenue line (service fees) by X%. Example: a 3% increase in target population size will increase all costs by 3% and the revenue from service fees by 3%.

- **Target group KAP (coverage)**

Assumes that you will increase (or decrease) the percentage of people in the target group who are fully covered. That is, you will increase effectiveness by increasing (or decreasing) services. That will increase (or decrease) your costs by an amount that you estimate. There will be no effect on revenues. Example: you plan to increase immunization coverage 5 percent. That will increase the cost of immunization services by 5% or an amount you estimate. It will have no effect on revenues.



- **PHC service quality**

Assumes that you will increase (or decrease) the amount and quality of services provided to each target group by X%. The number of people served would remain the same, but they would get more (or less) attention than before. Your costs would increase (or decrease) by the percentage you designate. There would be no effect on revenues. Example, you reduce the number of home visits by 25%, which reduces overall costs by 5%.

- **Management support**

Assumes that you will increase (or decrease) the amount of management support activities (training, supervision, etc.) each year by the percentage entered. Costs will increase (or decrease) by the same percentage. There would be no effect on revenues. Example: training for CHWs is expanded by 10%, which increases total costs by 15%.

- **Organisational capacity**

Assumes that you will decrease (or increase) the amount of effort it takes to carry out the programme. Performance would remain the same, only the amount of effort required to achieve that level of performance would change. The less effort required, the more efficient the organisation. Costs would decrease (or increase) by the amount of improvement (or deterioration) in efficiency. There would be no effect on revenues. Example: you increase overall efficiency by 5% each year, which reduces overall costs by the same amount each year.

- **Political commitment**

Assumes that the support for (or against) the programme increases (or decreases) by a set amount and that this affects resources (revenues) by a percentage that you designate. The effort required to achieve political commitment can be increased or decreased, and costs will change by an amount you designate. Example: you increase lobbying by 10%, which you estimate will increase costs by 5% and result in increased overall revenues of 10%.

- **Personnel resources**

Assumes that a loss or gain of key personnel will result in an additional expense or savings in costs of a designated percentage. Example: loss of key medical staff will increase costs of recruitment, training, supervision, which you estimate will increase personnel costs by 6%.

- **Revenues**

Assumes that overall revenues will increase (or decrease) each year by the indicated percentage. You can make changes in each revenue category (fees, contributions, etc.). The category will change by the percentage you enter. Example: if you increase fees by 2% each year, only the fee line will be affected, and it will increase 2% annually.

- **Expenditures**

Assumes that overall expenditures will increase (or decrease) each year by the indicated percentage. As with revenues, you can make changes in each expenditure category. In Levels 2 and 3 you can also change cost estimates for each PHC and management service. The change is made in the line item selected. Example: if you increase travel by 6%, only the travel line is increased.

- **Environment**

Assumes that changes in the overall environment have an indirect effect on revenues and costs, by the amount you designated. Examples: you expect the economy to improve steadily, which will lead to an average increase in government grants by 7%; you expect that there will be at least one serious storm that will result in damage to the project (which will raise costs 4%).

- **Inflation**

Assumes that total costs will rise (or fall) each year by the indicated percentage. This is independent of changes in the other variables. If inflation is already included in your initial



budget projections you should not enter it in this cell, also. However, you can enter a number to see the effects of a lower or higher rate of inflation. Example: inflation is projected to be 10% annually, which will increase total costs by that amount each year.

- **In-kind contributions**

Assumes that total costs will fall (or rise) as in-kind contributions increase (or decrease). The assumption is that most in-kind contributions are of labour, and that this will only affect personnel costs. As in-kind contributions increase, personnel costs can be maintained or reduced by the designated percentage. Example: in-kind contributions are projected to increase by 5% annually, which will allow you to reduce personnel costs by the same amount.

As you will see from the worksheets, there is an assumption that certain factors will have no effect on revenues, and that others will only affect one portion of revenues or expenditures. You can make adjustments for this assumption if it does not fit your situation. Just enter a special revenue or expense category in one of the "Other" lines in Table 3. Then enter your projections for the five-year period in the table. You will be able to revise them either directly (by changing the figures in Table 3) or indirectly (by adjusting the lines in the "what-if" analysis table (Table 4).

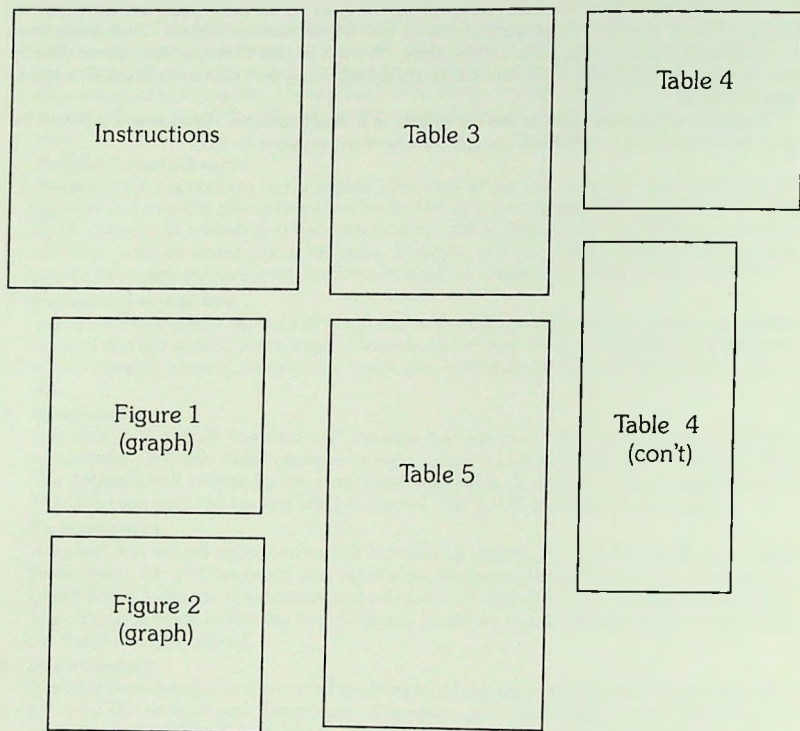
Sometimes you may want to see the effects of a single variable. To do this, enter zero for all of the assumptions in Table 4 except the one that you want to vary.



LEVEL 1 ANALYSIS

The following diagram shows how the four tables (and two graphs) in the computer spreadsheet are arranged. Since you will only be able to see a portion of the tables on your computer screen, this guide may help you locate the tables you need. You can also go to any table quickly by using the Name command and typing in one of the following: Table 3, Table 4, Table 5, and Graph. Also note that Tables 1 and 2 are not included in this computer file, but there are blank worksheets in Appendix C and in separate computer files, if you would like to print them out.

Layout of Level 1 spreadsheet (MOD9L1.WQ1)



Level 1 Worksheet

Strategic assessment

Summarise your sustainability objectives for your principal target groups, PHC services and coverage in Table 1.

Use this to remind you what you are attempting to sustain.

Table 1: Coverage objectives and services - example

Target group	PHC services	Coverage objectives
Children <2, <5 yrs	Child immunization	70% < 24 mo fully immunized
	Growth monitoring	55% < 5 yrs weighed
	Oral rehydration	65% < 5 used ORT last episode
	Nutrition education	<10% < 2 yrs low weight-for-age
Married women 15-49 yrs	Antenatal care & TT	70% pregnant enrolled in ANC
	Family planning	65% current users

Summarise your assessment of each sustainability factor in Table 2. Identify those that are threats (-), neutral (0), or opportunities (+) and devise strategies to neutralise the threats and take advantage of the opportunities.

If you are planning to do a financial assessment, fill in your estimates of the financial implications of each strategy. These should be in percentages and marked positive or negative. That is, will they increase or decrease revenues and/or costs. Some changes may affect both revenues and expenditures. For example, an increase in clients could increase costs but also increase service fees.

Decide if the change will be one-time only, a recurrent (permanent) change, or a compounded change (one that changes by a fixed amount or percentage each year). See the Introduction for examples.

In the example, the target population is expected to increase by five percent each year. Assuming this new group receives all the services now offered, that would increase costs about 5% each year. An increased clientele may also increase revenues slightly by paying fees. In this example only about 20% of clients pay any fees. Thus a 5% increase in clients would only raise fees by about 1% each year.

Develop general strategies for the penultimate two factors (8. Revenues and 9. Expenditures) but enter the detailed effects on each line item in Table 2.

Summarise your assessment of the current situation and your overall sustainability strategy.





Table 2: Sustainability factors worksheet

LEVEL 1			File MOD9_SA1.WQ1 or MOD9_SA1.WK1			FINANCIAL IMPLICATIONS					
Classify each factor, identify strategies where appropriate, estimate financial implications						Revenues			Expenditures		
Threat/opportunity factor; description		Effect	Strategy	Effect	1-Time Rev.	Rcrnt. Rev.	Cmpnd. Rev.	1-Time Costs	Rcrnt. Costs	Cmpnd. Costs	
1. Target group size. Threat: In-migration of 5% annually projected		--	Increase services: Raise revenues through increased fees, contributions. Reduce costs via community in-kind contributions	0			1.0%			+5%	
2. Target group KAP (coverage). Threat: New clientele need education and counseling		-	Add special IEC sessions for new IEC clientele	0						+2%	
3. PHC service quality. Opportunity: Improving steadily		+	TQM already installed: Quality should improve. Costs may decrease	+							
4. Management support. Opportunity: Strong and improving		+	Expect increase in efficiency: Should lower costs later	+							
5. Organisational capacity. Opportunity: Strong organization		+	No strategy at present: Could expand into other areas	+							
6. Political commitment. Threat: Lack of community support		-	Hold 2-3 education/PR sessions in each community	0					+1%		
7. Personnel resources. Threat: May lose key staff as donor support ends		-	Develop improved compensation package	0					+3%		
8. Revenues. Threat: Losing some donor support in 1993		-	Develop alternative sources of funds: Fees, fund-raising, training, contributions. Recurrent: Fees 5%; grants 20%, outside income 200% Compounded: Contrib 10%; govt 5%, grants 5%, outside 20%	+		+5% +20% +200%	+10% +5% +5% +20%				
9. Expenditures. Threat: Inflation of 3% annually. Other line item costs increasing, some decreasing		-	Increase revenues > 3% (see revenues). Recurrent: Indirect costs - 10%; in-kind contrib +10% Compound: Personnel +2%; travel +2%; supplies -3%; ODC -5%; in-kind +5%	+		-10% +10%	+2% +2% -3% -5% +3% +5%				
10. Environment. Neutral: No changes expected		0		0							

Entries cannot be made in shaded cells in the computer program.

Financial assessment

Enter your program revenue and expenditure figures for the most current year (CY) in Table 3. If you are using the computer program, it will copy these to Years 1-5. Later, you will be able to adjust these figures. However, you can do so now, if you wish. If so, make your changes in the appropriate line items of 3.1 and 3.2. (fees, contributions, etc.). Just type in the new figure. For example, if you expect fees in Year 1 to be 20, just type that in. The remaining years will remain the same. The computer will compute the totals for 3.1 and 3.2 and all the figures for 3.3. The example shows figures that have been adjusted to project current expectations. These figures have not been adjusted to reflect the sustainability strategy summarised in Table 2. This will be done next.

If you expect significant one-time increases or decreases in either revenues or expenditures in any specific year, then you should enter them in Table 3. For example, if a large government grant ends in Year 3, the amount of the grant should be subtracted from Years 4 and 5. Likewise, if you expect to spend a large sum on equipment in Year 1, that should be entered in Year 1.

You can return to this table anytime you wish to make any adjustments in your initial projections Table 3: Initial projections of revenues and expenditures (in '000).

**Table 3: Initial projections of revenues and expenditures
(in '000)**

LEVEL 1 WORKSHEET		MOD9L1.WQ1					
3.1 Revenues	CY	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Total
Fees	17	18	19	20	21	23	101
Contributions	22	23	24	25	26	28	126
Govt. subsidies	21	20	25	23	25	25	118
Grants/contracts	220	215	205	200	185	175	980
Outside income	2	3	2	2	2	2	11
Other	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0
Total	282	279	275	270	259	253	1,336
3.2 Expenditures	CY	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Total
Personnel	143	148	155	155	151	150	759
Travel/per diem	35	38	40	35	38	35	186
Supplies	29	28	32	28	27	26	141
Equipment	45	35	25	30	27	25	142
Other direct costs	10	12	13	14	15	16	70
Indirect costs	16	16	16	16	16	16	80
Other	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0
Total	278	277	281	278	274	268	1,378
3.3 Summary	CY	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Total
Revenues	282	279	275	270	259	253	1,336
Expenditures	278	277	281	278	274	268	1,378
Balance	4	2	-6	-8	-15	-15	-42

Note: can also be used for table 5



What-if analysis

Next, transfer the estimated financial implications (from Table 2) to the "what-if" analysis table, shown below. If you use the computer file that comes with this module, it will automatically calculate the effects of these changes on the initial projections you made in Table 3. The results will be shown in Table 5.

Table 4: What-if analysis worksheet

LEVEL 1 WORKSHEET				MOD9L1.WQ1 or MOD9L1.WK1		
Enter projected annual % increase (+) or decrease (-). See results in Table 5.						
Non-financial factors (See notes below)	1-Time rev.	Rcrnt. rev.	Compnd. rev.	1-Time costs	Rcrnt. costs	Compnd. costs
Target population size			1.0%			5.0%
Target group KAP (coverage)	X	X	X			2.0%
PHC service quality	X	X	X			
Management support	X	X	X			
Organisational capacity	X	X	X			
Political commitment					1.0%	
Personnel resources	X	X	X		3.0%	
Environment						

Target pop size: A(+) in revenues increases fees; A(+) in expenditures increases all costs
 Political commitment: A(+) increases all revenue; A(+) in expenditures increases all costs
 Environmental: A(+) increases all revenues; A(+) in expenditures increases all costs
 All other factors: No effect on revenues; A(+) in expenditures increases all costs

Now you can make changes in these assumptions to see their effects on costs and revenues. You can see, for example, WHAT would happen IF fees increased by 6% annually (or by any other percentage). You can see what would happen if expenses increased, or decreased; if the target population increased, and so forth. The results will be shown in Table 5, recomputed automatically. You can "play" with these assumptions, changing them over and over, and in various combinations. Obviously, these changes have to be realistic. Such changes can continue to be made until an acceptable break-even point is reached, at which point the programme reaches sustainability.

There are two graphs that have been prepared to display the total revenue and expenditure data for Table 3 and Table 5. This will give you a graphic "before and after" comparison. Press F10 to view the graph. Use the Name command to switch between graphs. They are called Figure 1 and Figure 2. In the Quattro Pro version of the spreadsheet, these two graphs are also embedded in the spreadsheet. They are located just below the Instructions and to the left of Table 5.



Financial factors	1-Time	Rcrnt.	Compnd.
Revenues categories	rev.	rev.	rev.
Fees		5.0%	
Contributions			10.0%
Govt. subsidies			5.0%
Grants/contracts		20.0%	5.0%
Outside income		200.0%	20.0%
Other			
Other			
Expenditures	1-Time	Rcrnt.	Compnd.
Categories	costs	costs	costs
Personnel			2.0%
Travel/per diem			2.0%
Supplies			-3.0%
Equipment			
Other direct costs			-5.0%
Indirect costs		-10.0%	
Other			
Other			
Other			
Other			
Other factors affecting expenditure			
Inflation	X	X	3.0%
In-kind contributions		10.0%	5.0%

A(+) increases revenues

A(-) decreases revenues

A(+) increases expenditures

A(-) decreases expenditures

A(+) increases all costs

A(-) decreases all costs



Table 5: Adjusted projections of revenues and expenditures

LEVEL 1 WORKSHEET		MOD9L1.WQ1 or MOD9L1.WK1					
3.1 Revenues	CY	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Total
Fees	17	19	20	21	23	25	108
Contributions	22	25	29	33	37	43	166
Govt. subsidies	21	21	27	26	30	31	136
Grants/contracts	220	229	231	237	234	236	1,168
Outside income	2	37	44	53	63	76	273
Other	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0
Total	282	332	351	371	387	410	1,851
3.2 Expenditures	CY	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Total
Personnel	143	149	167	179	187	199	881
Travel/PD	35	44	51	52	61	66	273
Supplies	29	31	37	36	38	39	181
Equipment	45	41	35	44	45	48	214
Other direct costs	10	13	15	16	18	20	82
Indirect costs	16	17	18	20	22	24	102
Other	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0
Total	278	295	323	347	371	396	1,733
3.3 Summary	CY	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Total
Revenues	282	332	351	371	387	410	1,851
Expenditures	278	295	323	347	371	396	1,733
Balance	4	37	28	24	16	14	118



Figure 1: Initial projections of revenues and expenditures (5 years)

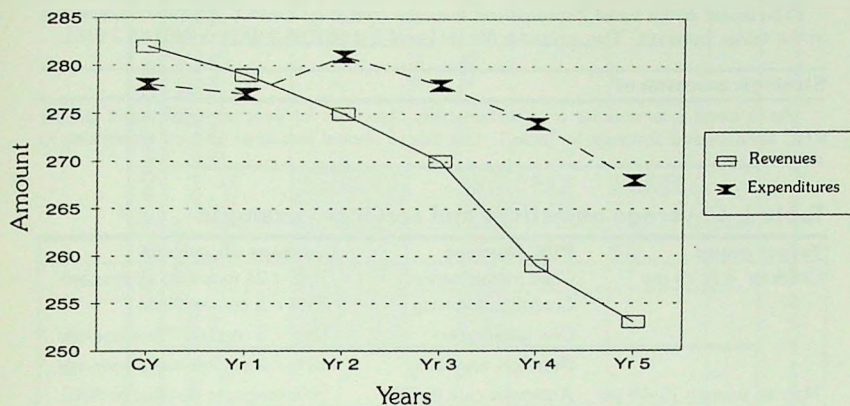
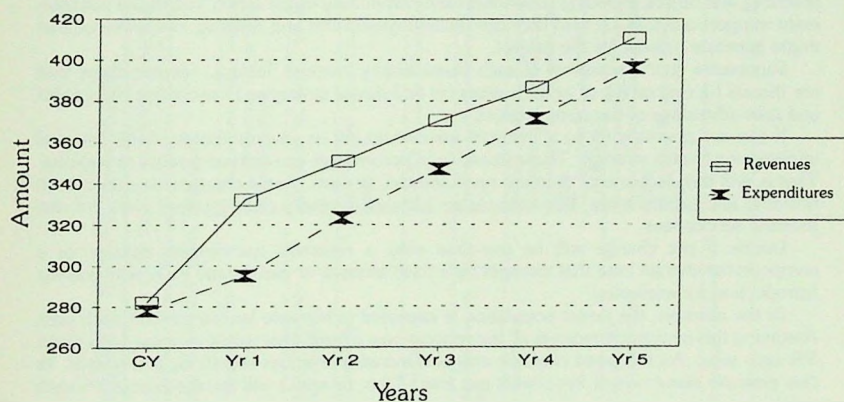


Figure 2: Adjusted projections for revenues and expenditures (5 years)



LEVEL 2 ANALYSIS

The layout of the Level 2 spreadsheet is similar to that for Level 1. There are differences in the tables, however. The computer file for Level 2 is MOD9L2.WQ1 or MOD9L2.WK1.

Strategic assessment

As in Level 1, summarise your sustainability objectives for your principal target groups, PHC services and coverage in Table 1. Use this to remind you what you are attempting to sustain.

Table 1: Coverage objectives and services - example

Target group	PHC services	Coverage objectives
Children < 2, <5 yrs	Child immunization	70% < 24 mos fully immunized
	Growth monitoring	55% < 5 yrs weighed
	Oral rehydration	65% < 5 used ORT last episode
	Nutrition education	<10% < 2 yrs low weight-for-age
Married women 15-49 yrs	Antenatal care & TT	70% pregnant enrolled in ANC
	Family planning	65% current users

There are also two parts to Table 2 in this Level. The first consists of eight sustainability factors (everything except PHC service quality and management services). You write in your principal services in the second part of Table 2. The example shows antenatal care, family planning, and others, including supervision and community organisation, two of the management support services. It also includes income generation and training, two services that might generate income for the project.

Summarise your assessment of each sustainability factor in Table 2. Identify those that are threats (-), neutral (0), or opportunities (+) and devise strategies to neutralise the threats and take advantage of the opportunities.

If you are planning to do a financial assessment, fill in your estimates of the financial implications of each strategy. These should be in percentages and marked positive or negative. That is, will they increase or decrease revenues and/or costs. Some changes may affect both revenues and expenditures. For example, an increase in clients could increase costs but also increase service fees.

Decide if the change will be one-time only, a recurrent (permanent) change, or a compounded change (one that changes by a fixed amount or percentage each year (see the Introduction for examples).

In the example, the target population is expected to increase by five percent each year. Assuming this new group receives all the services now offered, that would increase costs about 5% each year. An increased clientele may also increase revenues slightly by paying fees. In this example about one of five clients pay fees. Thus, revenues will increase about 1% each year.

Develop general strategies for revenues and expenditures, but enter the detailed effects on each service listed in the second part of Table 2.

Summarise your assessment of the current situation and your overall sustainability strategy.



Table 2: Sustainability factors worksheet

Level 2			File MOD9_SA2.WQ1 or MOD9_SA2.WK1			FINANCIAL IMPLICATIONS					
Classify each factor, identify strategies where appropriate, estimate financial implications			Effect	Revenues			Expenditures				
Factor: Threat/opportunity; description	Effect	Strategy		1-Time Rev.	Recnt. Rev.	Compnd. Rev.	1-Time Costs	Recnt. Costs	Compnd. Costs		
1. Target group size. Threat: Migration of 5% annually projected	-	Increase services: Raise revenues through increased fees, contributions; reduce costs via community in-kind contributions	0			+1%			+5%		
2. Target group KAP (coverage). Threat: New clientele need education and counseling	-	Add special IEC sessions for new IEC clientele	0						+2%		
5. Organisational capacity. Opportunity: Strong organisation	+	No strategy at present: Could expand into other areas	+								
6. Political commitment. Threat: Lack of community support	-	Hold 2-3 education/PR sessions in each community	0					+1%			
7. Personnel resources. Threat: May lose key staff as donor support ends	-	Develop improved compensation package	0					+3%			
8. Revenues. Threat: Losing some donor support in 1993	-	Develop alternative sources of funds: Fees, fund-raising, training, contributions Recurrent: Fees 5%; grants 20%; outside income 200% Compounded: Contrib 10%; govt 5%, grants 5%, outside 20%	+		+5% +20% +200%	+10% +5% +20%					
9. Expenditures. Threat: Inflation of 3% annually. Other line item costs increasing, some decreasing	-	Increase revenues > 3% (see revenues) Recurrent: Indirect costs -10%; in-kind contrib +10% Compound: Personnel +2%; supplies -3%, ODC -5%, in-kind +5%	+		-10% +10%	+2% +2% -3% -5% +3% +5%					
10. Environment. Neutral: No changes expected	0		0								

Entries cannot be made in shaded cells in the computer program.



Table 2: Sustainability factors worksheet

LEVEL 2			File MOD9_SA2.WQ1 or MOD9_SA2.WK1			FINANCIAL IMPLICATIONS					
Classify each factor, identify strategies where appropriate, estimate financial implications				Revenues			Expenditures				
PHC services and management support services	Effect	Strategy	Effect	1-Time Rev.	Recrnt. Rev.	Cmpnd. Rev.	1-Time Costs	Recrnt Costs	Cmpnd. Costs		
Factors: Threat/opportunity; description											
Antenatal care and tetanus toxoid: ANC medications and TT vaccines too expensive	--	Turn these over to MOH over next 5 years	0						-15%		
Family planning: Resistance from religious leaders	-	Hold annual seminar for religious leaders	0				+2%		+5%		
Growth monitoring and nutrition education: Lack of food supplements	-	Refer to CARE and MOH Nutrition Center	0								
Child immunization: Vaccines and services too expensive	--	Turn over to MOH over next 5 years: Continue IEC	0						-15%		
Oral rehydration: ORS packets low quality, not liked	-	Switch to cereal-based ORT, home remedies	0						-20%		
Training: Strong capability in staff training	+	Develop training courses for staff from other projects, for fee. See Table 3 for cost and revenue projections for this component. Startup costs, operating expenses for first 2-3 years might be financed by donor	+++								
Community organisation: Weak project capability in this area	-	Hire community organisation specialist	0					+25%			
Income generation: Projects not effective. Losing money. No return to project	-	Phase out over next 5 years (-20%/yr)	0						-20%		

Entries cannot be made in shaded cells in the computer program.

Financial assessment

Enter your program revenue and expenditure figures for the most recent year. The revenue estimates are the same as in Level 1. However, expenditures are different. In Level 2 you need to estimate the cost of each PHC service and management activity. You should enter **amounts**, not percentages in this section. If you do not know the amounts, you can estimate percentage distributions first and multiply them by the total expenditures or revenues. There is a computer file in this module that will do that for you. Simply enter the total expenditures for the current year, and then enter your estimates of the percent spent on each PHC service and management activity. The following example allocates the costs among eight PHC services and seven management functions. The computer calculates the amount allocated to each service and activity. When you have these figures, enter them in Table 3 (see 3.2).

EXPENDITURE DISTRIBUTION WORKSHEET				MOD9_EXPWQ1	
Total expenditures CY Enter here: 225,320					
PHC SERVICES	%	Amt.	MANAGEMENT	%	Amt
Tetanus toxoid (pregnant)	10	23,500	Planning	3	7,050
Antenatal care (pregnant)	20	47,000	Personnel mgmt		
Safe delivery			Training	12	28,200
Family planning	5	11,750	Supervision	6	14,520
Breast feeding			Financial mgmt	3	7,050
Growth monitoring	2	4,700	Logistics mgmt	3	7,050
Nutrition education	1	2,350	Information mgmt		
Acute respiratory infection			Community organ.	4	9,400
Child immunization	18	42,300	Training centre	6	4,000
Oral rehydration therapy	2	4,700	Other		
Vitamin A			Other		
Childhood disability			Subtotal	37	77,270
Diarrhoea disease control					
Water supply					
Tuberculosis treatment					
Malaria prevention/treatment					
STD/HIV					
Minor ailments					
Other: IGA	5	11,750			
Subtotal	63	148,050	Total PHC + MGT	100	225,320

The computer program will fill in the projections for Years 1-5. You can adjust these figures if you wish. Make your changes in the line items of 3.1 and 3.2, just as in Level 1. The computer will compute the totals and the figures for 3.3. The example (Table 3) shows adjusted figures.

If you anticipate a new source of revenue, make sure to add it to your initial projections. Just type it into one of the "Other" lines in Table, and enter your projected revenues for each year. In this example, two items have been added to the revenue sources: income generation activities, and a training centre.



**Table 3: Initial projections of revenues and expenditures
(in '000)**

LEVEL 2 WORKSHEET			MOD9L2.WQ1				
3.1 Revenues	CY	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Total
Fees	17,232	20,000	22,000	24,000	26,000	28,000	120,000
Contributions	22,410	25,000	30,000	35,000	40,000	45,000	175,000
Govt. subsidies	21,020	23,000	24,000	25,000	26,000	27,000	125,000
Grants/contracts	180,000	170,000	160,000	150,000	140,000	130,000	750,000
Outside income	2,169	2,500	3,000	5,000	6,000	7,000	23,500
Income gen. act.	2,345	2,345	2,345	2,345	2,345	2,345	11,725
Training centre	5,000	5,000	5,000	5,000	5,000	5,000	25,000
Other							0
Other							0
Total revenues	250,176	247,845	246,345	246,345	245,345	244,345	1,230,225
3.2 Expenditures	CY	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Total
PHC SERVICES							
Tetanus toxoid	23,500	24,000	25,896	24,000	27,890	28,795	130,581
Antenatal care	47,000	47,500	47,000	49,000	50,000	52,000	245,500
Family planning	11,750	12,500	13,589	15,000	17,895	15,000	73,984
Growth monitoring	4,700	5,200	4,589	4,589	5,900	6,100	26,378
Nutrition ed.	2,350	2,400	2,560	2,560	2,400	2,389	12,309
Child immun.	42,300	44,000	45,000	46,500	47,800	48,000	231,33
Oral rehydration	4,700	4,700	4,700	4,700	4,700	4,700	23,500
Income gen. act.	11,750	11,750	11,750	11,750	11,750	11,750	58,750
Other							0
Other							0
Other							0
MANAGEMENT SERVICES							
Planning	7,050	7,050	7,050	7,050	7,050	7,050	35,250
Training	28,200	28,000	27,000	28,200	28,200	28,200	139,600
Supervision	14,520	14,520	14,520	14,520	14,520	15,000	73,080
Financial mgmt	7,050	7,050	7,050	7,050	7,050	8,000	36,200
Logistics mgmt	7,050	7,050	7,050	7,050	7,050	7,050	35,250
Community organ.	9,400	9,400	9,400	9,400	9,400	9,400	47,000
Training centre	4,000	4,000	4,000	4,000	4,000	4,000	20,000
Other							0
Other							0
Total expend	225,320	229,120	231,154	235,369	245,605	247,434	1,188,682
3.3 Summary	CY	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Total
Revenues	250,176	247,845	246,345	246,345	245,345	244,345	1,230,225
Expenditures	225,320	229,120	231,154	235,396	245,605	247,434	1,188,682
Balance	24,856	18,725	15,191	10,976	(260)	(3,089)	41,543



What-if analysis

Now you can transfer the financial implications, from Table 2, to the "what-if" analysis table, shown overleaf. If the manager uses the computer file that comes with this module, it will automatically calculate the effects of these changes on the projections shown in Table 5.

You can make changes in these assumptions to see their effect on costs and revenues. You can see, for example, **what** would happen **if** ANC costs increased by 2% annually (or by any other percentage). You can see what would happen if expenses increased, or decreased; if the target population increased, and so forth. The results would be shown in Table 5 (See 5.3 below), computed automatically. The manager can "play" with these assumptions, changing them over and over, and in various combinations. Obviously, these changes have to be realistic. Changes can continue to be made until an acceptable break-even point is reached, at which point the programme reaches sustainability.

Table 4: What-if analysis worksheet

LEVEL 2 WORKSHEET				MOD9L2.WQ1		
Enter projected annual % increase (+) or decrease (-). Results seen in Table 5.						
Non-financial factors See notes below	1-Time rev.	Rcmt. rev.	Cmpnd. rev.	1-Time costs	Rcmt. costs	Cmpnd. costs
Target population size			10%			5.0%
Target group KAP (coverage)	X	X	X			2.0%
Organisational capacity	X	X	X			
Political commitment					10%	
Personnel resources	X	X	X		3.0%	
Environment						

Target pop size: A(+) in revenues increase fees; A(+) in expenditures increases all costs
 Political commitment: A(+) increases all revenue; A(+) in expenditures increases all costs
 Environmental: A(+) increases all revenues; A(+) in expenditures increases all costs
 All other factors: no effect on revenues; A(+) in expenditures increases all costs
 Ctrl + W to widen columns - Entries cannot be made in shaded areas (with X)



Financial factors	1-Time revenue	Rcmt. revenue	Cmpnd. revenue
Revenues categories			
Fees		6.0%	
Contributions			8.0%
Govt. subsidies			5.0%
Grants/contracts			-2.0%
Outside income			5.0%
Income generating activities			
Training centre		20.0%	20.0%
Other			
Other			
Expenditures Categories	1-Time costs	Rcurnt. costs	Cmpnd. costs
Tetanus toxoid			-15.0%
Antenatal care			-15.0%
Family planning	2.0%		5.0%
Growth monitoring			
Nutrition education			
Child immunization			-15.0%
Oral rehydration			-20.0%
Income generating activities			-20.0%
Other			
Other			
Other			
Planning			
Training			
Supervision			
Financial management			
Logistics management			
Community organisation		25.0%	
Training centre			
Other			
Other			
Other factors affecting expenditures			
Inflation	X	X	3.0%
In-kind contributions		10.0%	5.0%

A(+) increases revenues
A(-) decreases revenues

A(+) increases expenditures
A(-) decreases expenditures

A(+) increases all costs,
A(+) decreases PHC service costs
but management services not
affected



Table 5: Adjusted projections of revenues and expenditures

LEVEL 2 WORKSHEET				MOD9L2.WQ1			
5.1 Revenues	CY	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Total
Fees	17,232	21,206	23,418	25,652	27,909	30,188	128,374
Contributions	22,410	26,793	33,936	41,651	49,983	58,982	211,345
Govt. subsidies	21,020	24,051	26,254	28,566	30,995	33,544	143,410
Grants/contracts	180,000	166,400	153,072	140,011	127,210	114,666	701,359
Outside income	2,169	2,608	3,239	5,401	6,671	8,004	25,923
Income gen. activities	2,345	2,345	2,345	2,345	2,345	2,345	11,725
Training centre	5,000	9,446	11,336	13,603	16,323	19,588	70,296
Other	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0
Total revenues	250,176	252,850	253,600	257,229	261,436	267,318	1,292,433
5.2 Expenditures	CY	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Total
PHC SERVICES							
Tetanus toxoid	23,500	20,240	20,112	16,205	18,474	17,532	92,563
Antenatal care	47,000	39,980	35,482	33,934	31,540	30,386	171,323
Family planning	11,750	13,205	15,380	18,328	23,056	22,467	92,436
Growth monitoring	4,700	5,153	4,800	5,040	6,603	7,133	28,728
Nutrition education	2,350	2,377	2,655	2,788	2,767	2,895	13,482
Child immunization	42,300	37,232	34,509	32,558	30,602	27,742	162,643
Oral rehydration	4,700	3,713	3,156	2,683	2,280	1,938	13,770
Income gen. activities	11,750	9,283	7,890	6,707	5,701	4,846	34,425
Other	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0
MANAGEMENT SERVICES							
Planning	7,050	8,037	8,841	9,725	10,697	11,767	35,250
Training	28,200	31,948	34,143	38,757	42,633	46,896	139,600
Supervision	14,520	14,553	18,208	20,029	22,032	24,715	73,080
Financial mgmt	7,050	8,037	8,841	9,725	10,697	12,717	36,200
Logistics mgmt	7,050	8,037	8,841	9,725	10,697	11,767	35,250
Community organ.	9,400	10,716	11,788	12,966	14,263	15,689	47,000
Training centre	4,000	4,560	5,016	5,518	6,069	6,676	27,839
Other	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0
Total expenditures	225,320	221,420	222,245	227,530	241,241	248,607	1,003,589
5.3 Summary	CY	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Total
Revenues	250,176	252,850	253,600	257,229	261,436	244,345	1,292,433
Expenditures	225,320	221,420	222,245	227,530	241,241	248,607	1,003,589
Balance	24,856	31,430	31,355	29,699	20,196	18,711	288,843



Figure 1: Initial projections of revenues and expenditures (5 years)

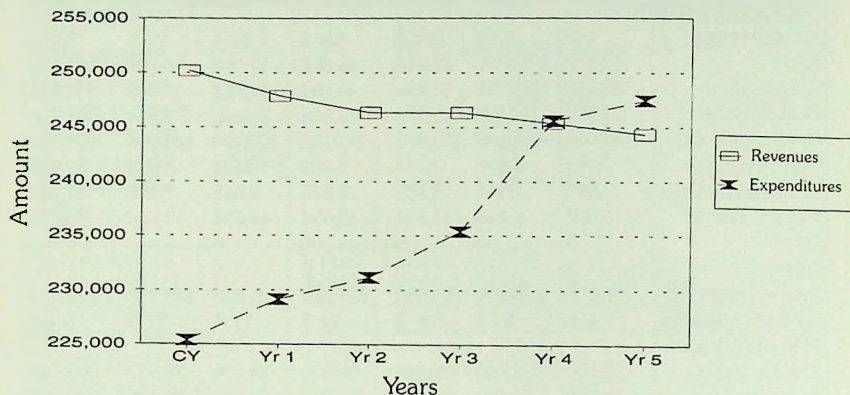
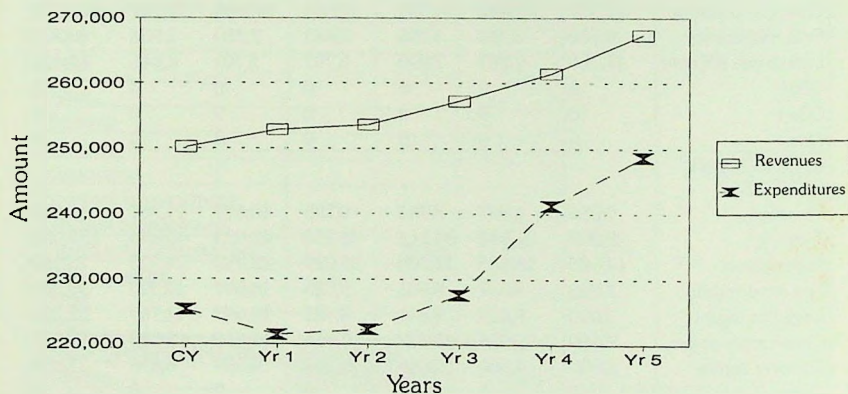


Figure 2: Adjusted projections to revenues and expenditures (5 years)



LEVEL 3 ANALYSIS

Assessing changes in population size and coverage

Level 3 uses the same forms and procedures as Level 2. The only difference is that you will need to estimate changes that may occur in the **size of your target groups**, and in your **coverage objectives**.

Your programme probably has only 3-5 target groups, and the change in the size of each group is likely to be similar. However, coverage levels are likely to vary by service, and you may decide to increase coverage for some services more than others. You may also decide to reduce coverage for some services in order to become more sustainable. You can use the following worksheet (a computerised version is available with this module) to make your estimates.

In the following example, the programme has five principal target groups: pregnant women (tetanus toxoid and antenatal care); married women aged 15-49 (family planning), children under age five (nutrition education and ORT), and children under age two (growth monitoring and immunization).

LEVEL 3 Worksheet for selecting target groups					
Target groups (age or condition)	Current pop size	Annual % change	Current % coverage	Annual % change	Total % change
WOMEN					
Tetanus toxoid (pregnant)	• 1,419	• 5%	• 15%	• 0	• 5%
Antenatal care (pregnant)	• 1,419	• 5%	• 15%	• 0	• 5%
Safe delivery	•	•	•	•	•
Family planning (married 15-49)	• 9,460	• 8%	• 25%	• 5%	• 13%
CHILDREN					
Breast-feeding	•	•	•	•	•
Growth monitoring (0-2yr)	• 4,400	• 5%	• 45%	• 0	• 5%
Nutrition education (0-5yr)	• 9,900	• 4%	• 65%	• 0	• 4%
Acute respiratory infection	•	•	•	•	•
Child immunization (0-2yr)	• 4,400	• 5%	• 65%	• 0	• 5%
Oral rehydration therapy (0-5yr)	• 9,900	• 4%	• 55%	• 0	• 4%
Vitamin A	•	•	•	•	•
Childhood disability	•	•	•	•	•
ALL GROUPS					
Diarrhoeal disease control	•	•	•	•	•
Water supply	•	•	•	•	•
Tuberculosis treatment	•	•	•	•	•
Malaria prevention/treatment	•	•	•	•	•
STD and HIV/AIDS	•	•	•	•	•
Treatment of minor ailments	•	•	•	•	•
Other	•	•	•	•	•



The size of each target group may change because of in- or out-migration, changes in births and deaths, expansion or contraction of the project's catchment area, and changes in socio-economic status; as some people move up and out of the target group, or others move into the target group. In this example, the target groups are expected to grow from 4-8 percent each year.

Coverage levels are shown in percentages, and range from 15-65 percent currently. The project does not plan to increase coverage, except for family planning, which would expand five percent per year. That is, at the end of five years, family planning coverage would reach about 50 percent.

Enter the projected **annual** changes in population size and in coverage objectives, then total the annual changes in the last column.

Next, add these changes to the Table 2 worksheet. The worksheet is reproduced on the next page. In this example the effects of an increase in the size of the ANC target group will be dealt with by expanding services. That will have financial implications. A 5% increase in the number of people needing ANC services will increase the cost of the ANC component by 5%. No change is planned in the coverage objective. It will remain at 15%. Thus, there is no financial effect for that factor.

The overall effect of these changes can be added to previous changes identified, which in this case was to turn the costs of medications and vaccines over to the MOH. Thus, the net effect will be to decrease costs 10% per year over the next five years.

In the ANC/TT example, the target population is expected to increase by five percent each year. Assuming this new group receives all the services now offered, that would increase costs about 5% each year. An increased clientele may also increase revenues slightly by paying fees. In this example the clients pay about 1/5 of the costs of service in fees. Thus, revenues will increase about 1% each year.

Develop general strategies for the revenue and expenditures but enter the detailed effects on each service listed in the second part of Table 2.

Financial assessment

The financial assessment is exactly the same as in Level 2. Please follow those instructions and use those worksheets.

What-if analysis

The "what-if" analysis is also the same as in Level 2. Just enter the figures that you generated in your Table 2 worksheet. An example of that worksheet follows. Please note that this is exactly the same as the Level 2 table, except that two of the non-financial factors (Target population size and Target group KAP) are not included. This is because they have been combined with PHC and management service factors and included directly in the revenue and expenditure cells.

As usual, you can make changes in any of these assumptions to see their effect on costs and revenues. The results would be shown in Table 5 (not displayed here, but see the computer file for illustrative data).



Table 2: Sustainability factors worksheet

LEVEL 3			File MOD9 SA3.WQ1 or MOD9 SA3.WK1			FINANCIAL IMPLICATIONS									
Classify each factor, identify strategies where appropriate, estimate financial implications										Revenues			Expenditures		
Factor: Threat/opportunity; description	Effect	Strategy	Effect	1-Time Rev.	Rcmt. Rev.	Cmpnd. Rev.	1-Time Costs	Rcmt. Costs	Cmpnd. Costs						
5. Organisational capacity. Opportunity: Strong organisation	+	No strategy at present: Could expand into other areas	+												
6. Political commitment. Threat: Lack of community support	-	Hold 2-3 education/PR sessions in each community	0					+1%							
7. Personnel resources. Threat: May lose key staff as donor support ends	-	Develop improved compensation package	0					+3%							
8. Revenues. Threat: Losing some donor support in 1993	-	Develop alternative sources of funds: Fees, fund-raising, training, contributions. Recurrent: Fees 5%; grants 20%; outside income 200% Compounded: Contrib 10%; govt 5%, grants 5%, outside 20%	+		+5% +20% +200%	+10% +5% +20%									
9. Expenditures. Threat: Inflation of 3% annually. Other line item costs increasing, some decreasing	-	Increase revenues >3% (see revenues), Recurrent: Indirect costs - 10%; in-kind contrib +10% Compound: Personnel +2%; travel +2%; supplies -3%. ODC -5%, in-kind +5%	+		-10% +10%	+2% +2% -3% -5% +3% +5%									
10. Environment. Neutral: No changes expected	0		0												

Entries cannot be made in shaded cells in the computer program. The program assumes that these factors do not affect revenues





Table 2: Sustainability factors worksheet

LEVEL 3			File MOD9_SA2.WQ1 or MOD9_SA2.WK1			FINANCIAL IMPLICATIONS					
Classify each factor, identify strategies where appropriate, estimate financial implications				Revenues			Expenditures				
PHC services and management support services	Effect	Strategy	Effect	1-Time Rev.	Rcmt Rev.	Cmpnd Rev.	1-Time Costs	Rcmt Costs	Cmpnd Costs		
Factor: Threat/ opportunity; description											
Antenatal care and tetanus toxoid. ANC medications and TT vaccines too expensive. Population size: Increase 5%/year Coverage objective: No change	--	Turn these over to MOH over next five years Expand services: client pays 20% (revenue up 1/5 = 1%) No change NOTE: cannot phase out completely; change affects both ANC and TT	0			+1%			-15% +5%		
Family planning. Resistance from religious leaders Population size: Increase 8%/year Coverage objective: Increase 5% annually for next 5 years	-	Hold annual seminar for religious leaders. Expand services: client pays 20% (revenue up 1/5 = 1%) Expand services: client pays 20% (revenue up 1/5 = 1%)	0			+16% +1%	+2%		+5% +8% +5%		
Growth monitoring and nutrition education. Lack of food supplements Pop size: GM group will grow 4% year; nutrition ed will grow 5%; Ave = 4.5% Coverage objective: No change	-	Refer to CARE and MOH Nutrition Center Expand services: client pays 0% (revenue unchanged) No change	0						+4.5%		
Child immunization. Vaccines and services too expensive Population size: Increase 5%/year Coverage obj: No change	--	Turn over to MOH over next 5 years; continue IEC Expand services: client pays 0% (revenue unchanged) No change	0						-15% +5%		
Oral rehydration: ORS packets low quality, not liked Population size: 4% annual increase Coverage obj: No change	-	Switch to cereal-based ORT, home remedies. Expand services; client pays 0% (revenue unchanged) No change	0						-20% +4%		
Training: Strong capability in staff training	++	Develop training courses for staff from other projects for fee. See Table 3 for cost and revenue projections for this component. Startup costs, operating expense for first 2-3 years might be financed by donor	0								
Community organisation: Weak project capability in this area	-	Hire community organisation specialist	0					+25%			
Income generation: Projects not effective. Losing money. No return to project	-	Phase out over next 5 years (-20%/yr)	0						-20%		

Table 4 What-if analysis worksheet

LEVEL 3 WORKSHEET						
Enter projected annual % increase (+) or decrease (-). Results seen in Table 5						
4.1 Non-financial factors	1-Time rev.	Rcrnt. rev.	Cmpnd. rev.	1-Time costs	Rcrnt. costs	Cmpnd. costs
Organizational capacity						
Political commitment					+1%	
Personnel resources					+3%	
Environment						

Total pop size: A(+) in revenues increase fees; A(+) in expenditures increases all costs
 Political commitment: A(+) increases all revenue; A(+) in expenditures increases all costs
 Environmental: A(+) increases all revenues; A(+) in expenditures increases all costs
 All other factors: no effect on revenues; A(+) in expenditures increases all costs
 Ctrl + W to widen columns - Entries cannot be made in shaded areas (with X)

(Ctrl+W to widen columns)

Financial Factors: Enter general adjustments in 4.2 and 4.3 only if not included in 4.4 PHC Services or 4.5 Management Services							
4.2 Revenue Categories	1-Time Rev.	Rcrnt. Rev.	Cmpnd Rev.	4.3 Expenditure Categories	1-Time Costs	Rcrnt. Costs	Cmpnd Costs
Fees		5%		Personnel			2%
Contributions			10%	Travel/per diem			2%
Government subsidies			5%	Supplies			-3%
Grants/contracts		20%	5%	Equipment			
Outside income		200%	20%	Other direct costs			-5%
Other:				Indirect costs		-10%	
				Inflation			3%
				In-kind contributions		10%	5%



Service factors: enter adjustments specific to services. Enter general adjustments in 4.2 and 4.3 on previous page.

4.4 PHC Services	1-Time Rev.	Rcrnt. Rev.	Cmpnd. Rev.	1-Time Costs	Rcrnt. Costs	Cmpnd. Costs
Tetanus toxoid			+1%			-10%
Antenatal care			+1%			-10%
Safe delivery						
Family planning			+2.6%	2%		18%
Breastfeeding						
Growth monitoring						4%
Nutrition education						4%
Acute respiratory infection						
Child immunization						-10%
Oral rehydration therapy						-16%
Vitamin A						
Childhood disability						
Diarrhoea disease control						
Water supply						
Tuberculosis treatment						
Malaria prevention/treatment						
Sexually transmitted disease/ HIV						
Treatment of minor ailments						
Income generation						-20%
Other						
Other						
4.5 Management Services	1-Time Rev.	Rcrnt. Rev.	Cmpnd. Rev.	1-Time Costs	Rcrnt. Costs	Cmpnd. Costs
Planning						
Personnel mgmt.						
Training						
Supervision						
Financial mgmt.						
Logistics mgmt.						
Information mgmt.						
Community organ.					25%	
Other						



Appendix C: Blank worksheets

WORKSHEET FOR SPECIFYING THE PURPOSE OF THE ANALYSIS

User/audience:

- ☐ Manager _____
- ☐ Board of directors _____
- ☐ Central directorate _____
- ☐ Donors _____
- ☐ Community _____
- ☐ Other _____

Purpose:

- ☐ General knowledge _____
- ☐ Monitoring progress _____
- ☐ Planning for the future _____
- ☐ Decision-making _____
- ☐ Other _____

Scope:

- ☐ Geographic area _____
- ☐ Programme/project/activity _____
- ☐ Time/duration _____



WORKSHEET FOR SPECIFYING OBJECTIVES, WHAT TO SUSTAIN AND AT WHAT LEVEL

Priority health coverage:	Indicators	Level
<input type="checkbox"/> Children < 5 yrs	_____	_____
<input type="checkbox"/> Children < 2 yrs	_____	_____
<input type="checkbox"/> Pregnant women	_____	_____
<input type="checkbox"/> Married women 15-49 yrs	_____	_____
<input type="checkbox"/> Other:	_____	_____
Services/institutions:		
<input type="checkbox"/> PHC outreach services	_____	_____
<input type="checkbox"/> PHC clinical services (list)	_____	_____
<input type="checkbox"/> Management functions (list)	_____	_____
<input type="checkbox"/> Agency/institution/unit (list)	_____	_____
<input type="checkbox"/> Other	_____	_____
Resources:		
<input type="checkbox"/> Funding (specify)	_____	_____
<input type="checkbox"/> Contributions (cash, in-kind)	_____	_____
<input type="checkbox"/> Personnel	_____	_____
<input type="checkbox"/> Technical capability	_____	_____
<input type="checkbox"/> Other:	_____	_____

WORKSHEET FOR SPECIFYING THE RESTRICTIONS ON SUSTAINABILITY

Sustainability restrictions

- | | |
|---|-------|
| <input type="checkbox"/> No restrictions | _____ |
| <input type="checkbox"/> Donor restrictions | _____ |
| <input type="checkbox"/> Other | _____ |
| <input type="checkbox"/> Self-sustaining | _____ |



TOTAL EXPENDITURES CY: (Enter here)

WORKSHEET FOR SELECTING THE TYPE OF ASSESSMENT AND LEVEL OF DETAIL

Strategic assessment: Check the level of analysis to be undertaken

- ☐ **Level 1:** A general analysis of each of the ten factors
☐ **Level 2:** A general analysis of eight of the factors plus a detailed assessment of two of them. You assess each **PHC service** and each **management service**.
☐ **Level 3:** A general analysis of six of the factors plus a detailed assessment of four of them. You assess the effects of changes in **target population size** and **target group KAP (coverage)** on each **PHC service** and each **management service**.

Financial assessment: Check the level of analysis to be undertaken

- ☐ **Level 1:** A general analysis of **revenues** by source and **expenditures** by general ledger items; and a "what-if" analysis of the effect of changes in the ten factors on future revenues and expenditures.
☐ **Level 2:** A detailed analysis of **revenues** by source and **expenditures** by **PHC service** and **management service**; and a "what-if" analysis of the effect of changes in the ten factors on future revenues and expenditures.
☐ **Level 3:** A detailed analysis of **revenues** by source and **expenditures** by **PHC service** and **management service** taking into account changes in **target population size** and **target group KAP (coverage)**; and a "what-if" analysis of the effect of changes in the ten factors on future revenues and expenditures.

Strategic assessment

Sustainability factors	Level 1	Level 2	Level 3
Population size	*	*	*
Target group KAP	*	*	*
PHC service quality	*	*	*
Management support	*	*	*
Political commitment	*	*	*
Personnel resources	*	*	*
Revenues	*	*	*
Expenditures	*	*	*
Environmental factors	*	*	*
* Summary estimates only			
X Detailed estimates			

N.B. Don't forget that you can mix levels of analysis. You can do a Level 3 Strategic assessment and a Level 1 Financial assessment, for example.

Financial assessment

Sustainability factors	Level 1	Level 2	Level 3
Population size	*	*	*
Target group KAP	*	*	*
PHC service quality	*	*	*
Management support	*	*	*
Political commitment	*	*	*
Personnel resources	*	*	*
Revenues	1	1	1
Expenditures	2	3	3
Environmental factors	*	*	*
* Summary estimates only			
X Detailed estimates			

- 1 Revenues by source
 2 Expenditures by general ledger item
 3 Expenditures by PHC service and management activity





Table 2: Sustainability factors worksheet

LEVEL 1			FINANCIAL IMPLICATIONS						
File MOD9_SA1.WQ1 or MOD9_SA1.WK1			Classify each factor, identify strategies where appropriate, estimate financial implications						
Threat/opportunity factor; description	Effect	Strategy	Effect	Revenues			Expenditures		
				1-Time Rev.	Rcrnt. Rev.	Cmpnd. Rev.	1-Time Costs	Rcrnt. Costs	Cmpnd. Costs
1. Target population size									
2. Target group KAP (coverage)									
3. PHC service quality									
4. Management support									
5. Organisational capacity									
6. Political commitment									
7. Personnel resources									
8. Revenues									
9. Expenditures									
10. Environment									

Entries cannot be made in shaded cells in the computer program.

Table 1: Coverage objectives and services

Target group	PHC services	Coverage objectives

**Table 3: Initial projections of revenues and expenditures
(in '000)**

LEVEL 1 WORKSHEET						MOD9L2.WQ1	
3.1 Revenues	CY	Yr1	Yr2	Yr3	Yr4	Yr5	Total
Fees							
Contributions							
Govt. subsidies							
Grants/contracts							
Outside income							
Other							
Other							
Total							
3.2 Expenditures	CY	Yr1	Yr2	Yr3	Yr4	Yr5	Total
Personnel							
Travel/per diem							
Supplies							
Equipment							
Other direct costs							
Indirect costs							
Other							
Other							
Other							
Total							
3.3 Summary	CY	Yr1	Yr2	Yr3	Yr4	Yr5	Total
Revenues							
Expenditures							
Balance							



Table 4: What-if analysis worksheet

LEVEL 1 WORKSHEET				MOD9L1.WQ1		
Enter projected annual % increase (+) or decrease (-). Results seen in Table 5.						
4.1 Non-financial factors (See notes below)	1-Time rev.	Recrnt. rev.	Cmpnd. rev.	1-Time costs	Recrnt. costs	Cmpnd. costs
Target population size						
Target group KAP (coverage)						
PHC service quality						
Management support						
Organisational capacity						
Political commitment						
Personnel resources						
Environment						

Total pop size: A(+) in revenues increases fees; A(+) in expenditures increases all costs
 Political commitment: A(+) increases all revenue; A(+) in expenditures increases all costs
 Environmental: A(+) increases all revenues; A(+) in expenditures increases all costs
 All other factors: No effect on revenues; A(+) in expenditures increases all costs

Financial factors	1-Time rev.	Recrnt. rev.	Cmpnd. rev.
Revenues categories			
Fees			
Contributions			
Govt. subsidies			
Grants/contracts			
Outside income			
Other			
Other			
Expenditures categories	1-Time costs	Recrnt. costs	Cmpnd. costs
Personnel			
Travel/per diem			
Supplies			
Equipment			
Other direct costs			
Indirect costs			
Other			
Other			
Other			
Other factors affecting expenditure			
Inflation			
In-kind contributions			

A(+) increases revenues
 A(-) decreases revenues

A(+) increases expenditures
 A(-) decreases expenditures

A(+) increases all costs
 A(-) decreases all costs



Table 2: Sustainability factors worksheet

LEVEL 2			File MOD9_SA2.WQ1 or MOD9_SA2.WK1			FINANCIAL IMPLICATIONS					
Classify each factor, identify strategies where appropriate, estimate financial implications				Revenues			Expenditures				
Factor: Threat/opportunity; description	Effect	Strategy	Effect	1-Time Rev.	Rcrnt. Rev.	Cmpnd. Rev.	1-Time Costs	Rcrnt. Costs	Cmpnd. Costs		
1. Target population size											
2. Target group KAP (coverage)											
3. PHC service quality											
4. Management support											
5. Organisational capacity											
6. Political commitment											
7. Personnel resources											
8. Revenues											
9. Expenditures											
10. Environment											



Module 9: Sustainability analysis: appendix C

[illegible]

Expenditure distribution worksheet			MOD9 EXPWQ1		
PHC SERVICES	%	AMT	MANAGEMENT	%	AMT
Tetanus Toxoid (pregnant)			Planning		
Antenatal care (pregnant)			Personnel mgmt		
Safe delivery			Training		
Family planning			Supervision		
Other			Financial mgmt.		
Breast-feeding			Logistics mgmt.		
Growth monitoring			Information mgmt.		
Nutrition education			Commun. organ.		
Acute respiratory infection			Training centre		
Child immunization			Other		
Oral rehydration therapy			Subtotal, Mgt. services		
Vitamin A					
Childhood disability					
Other					
Water supply					
Tuberculosis treatment					
Malaria prevention/treatment					
STD/HIV					
Minor ailments					
Other: IGA					
Subtotal, PHC services			Total, PHC + Mgt		



**Table 3: Initial projections of revenues and expenditures
(in '000)**

LEVEL 2 WORKSHEET			MOD9L2.WQ1				
3.1 Revenues	CY	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Total
Fees							
Contributions							
Govt. subsidies							
Grants/contracts							
Outside income							
Income gen. act.							
Training centre							
Other							
Other							
Total							
3.2 Expenditures	CY	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Total
Tetanus toxoid							
Antenatal care							
Family planning							
Growth monitoring							
Nutrition education							
Child immun.							
Oral rehydration							
Income gen. activities							
Other							
Other							
Other							
Planning							
Training							
Supervision							
Financial mgmt							
Logistics mgmt							
Community organ.							
Training centre							
Other							
Other							
Total							
3.3 Summary	CY	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Total
Revenues							
Expenditures							
Balance							

Note: can also be used for table 5



Table 4: What-if analysis worksheet

LEVEL 2 WORKSHEET				MOD_L2.WQ1		
4.1 Non-financial factors	1-Time Rev.	Rcrnt. Rev.	Cmpnd. Rev.	1-Time Costs	Rcrnt. Costs	Cmpnd. Costs
Target group size						
Target group KAP (Coverage)						
Organizational capacity						
Political commitment						
Personnel resources						
Environmental factors						

(Ctl + W to widen columns)

Financial Factors: Enter general adjustments in 4.2 and 4.3 only if not included in 4.4 PHC series or 4.5 Management Services

Financial factors	1-Time	Rcrnt.	Cmpnd.	A(+) increases revenues A(-) decreases revenues
4.2 Revenues categories	revenue	revenue	revenue	
Fees				
Contributions				
Govt. subsidies				
Grants/contracts				
Outside income				
Other				
Other				
4.3 Expenditures Categories	1-Time costs	Rcurnt costs	Cmpnd. costs	A(+) increases expenditures A(-) decreases expenditures
Personnel				
Travel/per diem				
Supplies				
Equipment				
Other direct costs				
Indirect costs				
Other				
Other				
Other				
Other factors affecting expenditures				A(+) increases all costs A(-) decreases all costs
Inflation				
In-kind contributions				Mgmt services not affected



Service Factors: Enter adjustments specific to services. Enter general adjustments in 4.2 and 4.3 above.

4.4 PHC services	1-Time rev.	Rcrnt. rev.	Cmpnd. rev.	1-Time costs	Rcrnt. costs	Cmpnd. costs
Tetanus toxoid						
Antenatal care						
Safe delivery						
Family planning						
Breast feeding						
Growth monitoring						
Nutrition ed.						
Acute resp. infect.						
Child immunization						
Oral rehydration						
Vitamin A						
Child disability						
Diarrhoeal control						
Tuberculosis						
Malaria						
STD/HIV/AIDS						
Minor ailments						
Income generation						
Other						
Other						
4.5 Management support services	1-Time rev.	Rcrnt. rev.	Cmpnd. rev.	1-Time costs	Rcrnt. costs	Cmpnd. costs
Planning						
Personnel Mgmt.						
Training						
Supervision						
Financial mgmt.						
Logistics mgmt.						
Information mgmt.						
Community org.						
Other						
Other						
Other						



LEVEL 3 WORKSHEETS

WORKSHEET FOR SELECTING TARGET GROUPS					
Target groups (age or condition)	Current pop size	Annual %change	Current %coverage	Annual %change	Total
WOMEN					
Tetanus toxoid (pregnant)					
Antenatal care (pregnant)					
Safe delivery					
Family planning (married 15-49)					
CHILDREN					
Breast-feeding					
Growth monitoring (0-2yr)					
Nutrition education (0-5yr)					
Acute respiratory infection					
Child immunization (0-2yr)					
Oral rehydration therapy (0-5yr)					
Vitamin A					
Childhood disability					
ALL GROUPS					
Diarrhoeal disease control					
Water supply					
Tuberculosis treatment					
Malaria prevention/treatment					
STD and HIV/AIDS					
Treatment of minor ailments					





Table 2: Sustainability factors worksheet

LEVEL 3			File MOD9_SA3.WQ1 or MOD9_SA3.WK1			FINANCIAL IMPLICATIONS					
Classify each factor, identify strategies where appropriate, estimate financial implications				Revenues			Expenditures				
Factor: Threat/opportunity; description	Effect	Strategy	Effect	I-Time Rev.	Rcrnt. Rev.	Cmpnd. Rev.	I-Time Costs	Rcrnt. Costs	Cmpnd. Costs		
5. Organisational capacity											
6. Political commitment											
7. Personnel resources											
8. Revenues											
9. Expenditures											
10. Environment											

Table 2: Sustainability factors worksheet

Level 3 File MOD9_SA2.WQ1 or MOD9_SA2.WK1			FINANCIAL IMPLICATIONS						
Classify each factor, identify strategies where appropriate, estimate financial implications			Effect	Revenues			Expenditures		
PHC services and management support services	Effect	Strategy		1-Time Rev.	Rcrnt. Rev.	Cmpnd. Rev.	1-Time Costs	Rcrnt. Costs	Cmpnd. Costs
Factor: Threat/opportunity: description									



Table 4: What-if analysis worksheet

LEVEL 3 WORKSHEET				MOD9L3.WQ1 or .WK1		
Enter projected annual % increase (+) or decrease (-). Results seen in Table 5 -- >						
4.1 Non-financial factors	1-Time rev.	Rcurnt. rev.	Cmpnd. rev.	1-Time costs	Rcurnt. costs	Cmpnd. costs
Organisational capacity						
Political commitment						
Personal resources						
Environmental factors						

(Cr1 + W to widen columns)

Financial Factors: Enter general adjustments in 4.2 and 4.3 only if not included in 4.4 PHC Services or 4.5 Management Services

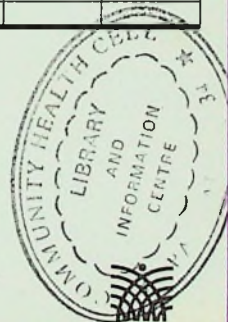
4.2 Revenue categories	1-Time rev.	Rcurnt. rev.	Cmpnd. rev.
Fees			
Contributions			
Government subsidies			
Grants/contracts			
Outside income			
Other:			

4.3 Expenditure categories	1-Time rev.	Rcurnt. rev.	Cmpnd. rev.
Personnel			
Travel/per diem			
Supplies			
Equipment			
Other direct costs			
Indirect costs			
Inflation			
In-kind contributions			



Service Factors: Enter adjustments specific to services. Enter general adjustments in 4.2 and 4.3 above.

4.4 PHC services	1-Time rev.	Rcrnt. rev.	Cmpnd. rev.	1-Time costs	Rcrnt. costs	Cmpnd. costs
Tetanus toxoid						
Antenatal care						
Safe delivery						
Family planning						
Breast feeding						
Growth monitoring						
Nutrition ed.						
Acute resp. infect.						
Child immunization						
Oral rehydration						
Vitamin A						
Child disability						
Diarrhoeal disease control						
Tuberculosis						
Malaria						
STD/HIV/AIDS						
Minor ailments						
Income generation						
Other						
Other						
4.5 Management support services	1-Time rev.	Rcrnt. rev.	Cmpnd. rev.	1-Time costs	Rcrnt. costs	Cmpnd. costs
Planning						
Personnel Mgmt.						
Training						
Supervision						
Financial mgmt.						
Logistics mgmt.						
Information mgmt.						
Community org.						
Other						
Other						
Other						



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Acronyms and abbreviations

AIDS	Acquired immune deficiency syndrome
AKF	Aga Khan Foundation
ANC	Antenatal care
CHW	Community health worker
CY	Current year
FP	Family planning
GLI	General ledger items
GM	Growth monitoring
HW	Health worker(s)
IEC	Information, education, communication
IGA	Income-generating activities
KAP	Knowledge, attitudes, practice (behaviour)
MCH	Maternal and child health
MIS	Management information system(s)
MOH	Ministry of health
NGO	Non-governmental organisation
ODC	Other direct costs
ORT	Oral rehydration therapy
PD	Per diem
PHC	Primary health care
PHC MAP	Primary Health Care Management Advancement Programme
PRICOR	Primary Health Care Operations Research
SES	Socio-economic status
TB	Tuberculosis
TT	Tetanus toxoid
TQM	Total quality management
URC	University Research Corporation
WHO	World Health Organization



Glossary

Assessment: An evaluation or judgement

Break-even: The point at which revenues equal expenditures

Community health worker (CHW): A person indigenous to the community who provides basic preventive and curative health services to members of the community. Includes village health workers, health guides, and other terms

Compounded: A change that increases or decreases over time by a fixed amount or percentage

Costs(s): The value of a good or service, which is conceptually defined as the value that could be gained by using the resource in a different way. For example, the cost of drugs could be seen as the value of using the resources to purchase some other commodity or service.

Coverage: The percent of a target group that has received a service or is protected from a disease or health problem

Effectiveness: The degree to which desired outcomes are achieved

Efficiency: The degree to which desired outcomes are achieved without wasting resources

Factor: One of the elements that produces a result

Indicator: An indirect measure of an event or condition. For example, a baby's weight-for-age is an indicator of the baby's nutritional status.

Inputs: Resources (personnel, materials and equipment, information and money)

Institution: An established organisation, group, agency or other formal entity

Management: The art and science of getting things done through people

Objectives: The output and/or effect that a programme hopes to achieve

One-time: A change that occurs only once and is neither continued nor repeated

Opportunity: A favourable circumstance

Outcomes: Results of programme, including outputs, effects and impacts

Outputs: Products and services provided by a PHC programme

Effects: Changes in knowledge, skills, attitude and behaviour, (including coverage) as a result of a PHC programme

Impacts: Changes in health status, (mortality, morbidity, disability, fertility) as a result of a PHC programme



Primary health care: Essential health care, accessible at affordable cost to the community and the country, based on practical, scientifically sound and socially acceptable methods. It includes at least eight components: health education, proper nutrition, clean water and basic sanitation, maternal and child health care, immunization, control of common diseases and injuries, prevention of local endemic diseases, essential drugs.

Processes: Activities or tasks carried out in programme

Projection: An estimate of future status

Recurrent: A change that is made permanent

Resource: Available means, usually personnel, material, funds, information

Revenue: Money received

Strategy: A general plan for obtaining an objective

Sustainability: The ability or prospect to continue, prolong, keep something up

System: A set of discrete, but interdependent, components designed to achieve one or more objectives

Target group: Specific groups of people designated to receive a PHC service, such as children under age 2 designated to receive immunizations

Threat: A menace or constraint to achieving an objective



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MODULE 9

USER'S GUIDE

Primary Health Care Management Advancement Programme

