Phase 5. Monitoring, Evaluation and Reporting

Monitoring and evaluation, Phase 5 of a CYCI programme cycle, takes place at various levels. The implementing agency must monitor and evaluate the impact of the programme at the project level to ensure that individual enterprises and credit groups are developing satisfactorily. It must also monitor and evaluate its implementation of the entire programme, especially financial flows, loan recovery rates and the achievement of the overall goals of the programme. The implementing agency must also report regularly to the lead agency, donor agency or other funding bodies involved in the initiative.

Monitoring, evaluation and reporting should cover not only the performance of the programme itself (number of loans issued, loan recovery rates, etc.) but also the impact of the programme and its success in achieving its stated goals. One goal of the CYCI is to alleviate poverty. Monitoring and evaluation should therefore include an assessment of its impact on poverty in the target area.

Step 6: Selecting, Gathering and Interpreting Appropriate Indicators

Indicators that can be used to monitor and evaluate the implementation of a CYCI programme fall into two major categories:

- those that measure directly the activities of the implementing agency ('implementation indicators'); and
- those that measure the impact those activities have on the target group of beneficiaries and the communities in which they live and work ('impact indicators').

(i) Implementation indicators

Provided that the implementing agency has a reliable management information system, it can use information gained from that system to monitor and evaluate its delivery of the programme. The basis of such a system should be the accountancy and portfolio systems described in Chapter 2 of this module.

The indicators that can be generated include those that measure portfolio performance, productivity and efficiency, and financial sustainability. The calculation and interpretation of these various kinds of can be extremely complex. The indicators presented here are some of the more simple and useful ones.[1]

In the discussion that follows, 'portfolio' refers to the total amount loaned. Thus 'outstanding portfolio' refers to the total of all the unpaid balances of all loans at a given point in time.

Portfolio performance indicators: these measure, in broad terms, how well borrowers are performing in terms of repaying their loans, and whether delinquencies and defaults are reaching dangerous levels.

One of the most useful of these indicators is *portfolio at risk*. This is calculated by dividing the outstanding balance on all loans that have a payment past due, by the total unpaid balance of all outstanding loans.

$$\text{portfolio at risk} = \frac{\text{unpaid balance of loans with payment past due}}{\text{total of unpaid balance of loans (including past due)}}$$

For example, assume the implementing agency

[1]This section is largely drawn from CGAP (1998), Ledgerwood (1999) and UNDP (1997), all of which provide further details of these and other indicators.

has made a total of five loans of $100 each, and that three borrowers have paid back $20 of their loans. Two borrowers have missed a payment and only paid back $10. Thus, there are two loans past due, each with an unpaid balance of $90, for a total of $180. There are also three non-delinquent loans with an unpaid balance of $80, for a total of $240. Therefore the total unpaid balance is 180 + 240 = $420, and the portfolio at risk is 180 divided by 420, which equals .4286 or 43 per cent. This would probably be considered an unacceptably high level of portfolio at risk.

As a general guide, portfolio at risk should not normally rise above 15 per cent.

Portfolio at risk should not be viewed in isolation, or it may be misleading. For example, if the implementing agency has written off a large number of loans (i.e. has decided that the likelihood of recovering the loan is remote and has transferred funds from the loan loss reserve to the outstanding unpaid balance), the portfolio will present a healthier picture than is warranted by the high delinquency rate of the programme. Therefore portfolio at risk should always be compared with an indicator which shows the value of loans that are written off, such as the loan write-off ratio. This is calculated by dividing the total value of loans written off over a period (month, quarter, half-year, year) by the average outstanding balance over the same period (to obtain the average outstanding balance, add the outstanding balance at the beginning of the period to the outstanding balance at the end of the period, and divide by two).

$$\text{Loan write-off ratio} = \frac{\text{amount written off over the period}}{\text{average outstanding portfolio over the period}}$$

As a general guide, the loan write-off ratio should not be higher than 2 per cent.

Another situation, in which portfolio at risk can paint an unnecessarily negative picture, is where a large number of borrowers repay their loans via a financial intermediary, such as a village bank. If only one out of ten borrowers defaults on a payment, the total of all outstanding loans to that group may be included in the portfolio at risk, even though only one borrower is delinquent. In these circumstances, another indicator can be used: the current repayment rate. This is calculated by dividing payments received during a specified period (e.g. one month) by payments that became due during the same period.

$$\text{Current repayment rate} = \frac{\text{number of payments received during the period}}{\text{number of payments falling due during the period}}$$

So if, for example, in one month 12 people should have made a payment but only nine payments were received, the current repayment rate is 9/12 which equals 75 per cent.

Productivity and efficiency indicators: these measure how well the implementing agency is making use of the resources at its disposal.

Productivity of staff can be measured by dividing various amounts, such as the number of loans outstanding or the portfolio outstanding, by the number of field officers working in the programme. A simple indicator would be *field officer productivity*, defined as the number of loans outstanding per field officer.

$$\text{field officer productivity} = \frac{\text{number of loans outstanding}}{\text{number of field officers}}$$

As a general guide, a target figure of 175 for the loan staff efficiency could be set (assuming that all field officers work full-time).

It should be noted, especially when making comparisons between different agencies, that the loan staff efficiency varies with the length of the loan term and the frequency of repayments. A field officer can handle more loans when loan terms are longer and repayments less frequent.

The same calculation can be used to arrive at a figure for office staff productivity, defined as the number of outstanding loans per office staff member (this includes all the staff at the implementing agency's offices who are engaged on the programme, but excluding field officers).

$$\text{office staff productivity} = \frac{\text{number of loans outstanding}}{\text{number of office staff members}}$$

Field officer productivity and office staff productivity can be combined to produce an indicator of *programme staff productivity*, defined as the number of outstanding loans per programme staff member (this includes all the staff engaged on the programme, including both those at the implementing agency's offices and field officers).

$$\text{programme staff productivity} = \frac{\text{number of loans outstanding}}{\text{total number of programme staff members}}$$

A target figure for each of these productivity ratios could be 200.

The best indicator of operational efficiency it the *operating cost ratio*. This is defined as the operating expenses over a given period, divided by the average portfolio outstanding over the same period. Operating costs include salaries, administrative expenses, depreciation and overhead but do not include loan loss provisions or financial costs such as interest payable on borrowed funds. The average portfolio outstanding over a given period is calculated by adding the outstanding portfolio at the beginning of the period to the outstanding portfolio at the end of the period and dividing by two.

$$\text{Operating cost ratio} = \frac{\text{operating costs over a given period}}{\text{average outstanding portfolio over the same period}}$$

In general, the implementing agency should aim to have an operating cost ratio of between 13 and 21 per cent.

Another indicator of efficiency is cost per unit of currency loaned. If, for example, the loans are paid in US dollars, the cost per dollar loaned is calculated as the operating costs over a given period, divided by the total amount dispersed (in dollars) over the same period.

$$\text{Cost per unit of currency} = \frac{\text{operating costs over a given period}}{\text{total amount loaned over the same period}}$$

The lower the figure for cost per unit of currency loaned, the more efficiently the organisation is working.

In general, the implementing agency should aim for a cost per unit of currency no higher than 15 per cent.

Financial sustainability indicators: these measure the extent to which the implementing agency can cover its costs with earned revenue.

One indicator of financial sustainability is *operational self-sufficiency*. This is calculated by dividing earned income (i.e. operating income, excluding grants) by operating costs, financing costs and loan loss provisions.

$$\text{operational self-sufficiency} = \frac{\text{operating income}}{\text{operating costs + loan loss provisions}}$$

Operational self-sufficiency is achieved when this figure is greater than 100 per cent.

Another indicator of financial sustainability is *financial self-sufficiency*. This is calculated in a similar way to operational self-sufficiency, except that included in costs are financing costs (such as interest payable on borrowed funds), and cost of capital (which includes the impact of inflation on the loan fund).

$$\text{financial self-sufficiency} = \frac{\text{operating income}}{\text{operating costs + financing costs + loan loss provisions + cost of capital}}$$

Again, financial self-sufficiency is achieved

when this figure is greater than 100 per cent.

Calculating the cost of capital is quite complex, especially where part or all of the loan fund is itself borrowed capital on which the implementing agency must pay interest. It is recommended that a figure for the *adjusted* cost of capital be used, as this takes into account cases where funds may be borrowed at different rates, e.g. commercial (market) rates and subsidised or concessionary rates.

Adjusted cost of capital =

[inflation rate x (average equity – average fixed assets)] + [(average funding liabilities x market rate of debt) – actual financing costs]

(ii) Impact indicators[1]

All of the indicators so far discussed deal with measuring the performance of the implementing agency in administering loans and managing the loan fund. It is equally important, although perhaps more difficult, to measure the impact that the programme is having on the target beneficiaries and their communities. These impacts can have different dimensions: a micro-credit and enterprise development programme's impact on beneficiaries may be economic, social and cultural, or again personal and psychological.

However, analysing these impacts presents some difficulties. It is difficult to measure a decrease in poverty in a local area. While some indicators may suggest that the programme has caused a small increase in standards of living, this may only be temporary, or may be explained by other causes. For example, money is fungible, in other words, it can be used in different ways. Money that was paid as a loan to improve a business may end up benefiting the household of the entrepreneur; providing a modest increase in standard of living while not adding to the profitability or sustainability of his/ her business. Also, beneficiaries may provide inaccurate reports on the progress of their business, because they think that to do so may improve their chances of getting another loan through the programme.

In order to overcome these difficulties, it is advisable to use several methods in combination. These should be both qualitative and quantitative; in other words, they should include both statistical analysis and observation of the beneficiaries and their life circumstances in the local setting. Qualitative data complements the information contained in statistical data and can be used, for example, to help explain unexpected results arising from quantitative analysis.

Impacts can be measured at the enterprise level, the household level and the community level. Some examples of indicators that can be used at each of these levels included the following:

At the enterprise level:

- **output** – how much is the enterprise producing? How much compared with last month, last year?
- **asset accumulation** – has the enterprise increased its assets (e.g. through the purchase of new machinery, equipment or animals)?
- **technology** – has the enterprise introduced new technology to improve quality or quantity of output?
- **employment** – how many people are employed by the enterprise? How many were employed last month, last year?
- **income** – what is the net monthly income of the enterprise? What was it a year ago?
- **market** – Where does the enterprise sell its goods or services? Has it penetrated new markets in the last month? In the last year?

At the household level:

- **income** – what is the total monthly income

[1]This section draws from Ledgerwood (1999).

of the beneficiary's household? What was it a year ago?

- **asset accumulation** – have the assets of the household increased? In what ways?
- **savings** – what level of savings has the household accumulated? What was the level one year ago?
- **consumption** – has the household's consumption of food increased? Has its consumption of non-food items (e.g. clothing, fuel) increased?
- **empowerment** – has the beneficiary's decision-making role, status, or control of financial resources increased?

At the community level:

- **employment** – what is the percentage of unemployed people in the community? Of under-employed people? Of underemployed or unemployed people between the ages of 15 and 30?
- **income** – has the income of the community as a whole increased?
- **health and well-being** – have there been decreases in the numbers of unhealthy/malnourished/seriously ill people in the community? Has there been a change in the incidence of infant mortality?
- **education** – have members of the community benefited from new educational opportunities? Increased levels of literacy?

These indicators can be gathered using surveys and questionnaires, as well as the techniques of participatory rural appraisal. *These techniques are discussed in detail in Module 2 of the CYCI Toolkit (see p. 7).*

Impact indicators can be tabulated using the logical framework described below.

Interpreting indicators

Care should be taken in interpreting indicators, especially where comparisons are being made between different agencies, programmes or communities. Differences may be caused by extraneous factors that are not built into the data being interpreted, but which have an effect on it. For example, different agencies may have different ways of calculating their assets (CGAP, 1998); different beneficiaries may interpret survey questions differently and respond accordingly (Ledgerwood, 1999); an increase or decrease in prosperity in a local area may be caused not by the programme but by some other factor, such as investment by a large multinational or a natural disaster such as drought or storm damage.

In particular, when assessing or comparing the performance of different implementing agencies, it should be borne in mind that such factors as amount of loans, size, growth rate and maturity of the organisation, geographical location and conditions, and inflation and exchange rates will affect the performance of the agency as reflected in the indicators discussed above (CGAP, 1998). For example, where field officers are engaged not only in credit maintenance but also in providing ongoing business counselling and support, this will be reflected in a lower figure for field officer productivity (based solely on the number of loans outstanding) than where field officers do not provide this kind of support.

Where possible, trend analysis should be employed in interpreting indicators. This entails looking not only at how things are at a given moment, but also how they have changed over time. Seasonal cycles, for example, may seriously affect performance month-by-month, whereas comparison with one year ago will yield a truer picture.

Step 7: Tools for Monitoring, Evaluation and Reporting

The CYCI makes use of a number of tools for monitoring, evaluation and reporting. These tools are designed to benefit both the implementing agency by providing it with a

clearer picture of its own performance, and the supervising and funding bodies, which require confirmation that the loan fund is being put to good use and that the programme is producing the desired result.

The main tools are:

- monthly report
- quarterly report
- annual report.

Other tools are the logical framework, the minutes of various meetings, particularly those of the Management Advisory Board, and mid-term and terminal evaluation reports.

Monthly Report

The monthly report is a *pro forma* completed by the implementing agency on a monthly basis and submitted to the Management Advisory Board and the lead agency that initiated the programme. It generates an overall picture of the activities over the previous month, as well as providing for trend analysis and the generation of some basic performance indicators. It is therefore a useful tool not only for reporting purposes but also for the implementing agency to monitor its ongoing management of the programme.

A blank *pro forma* for a monthly report is included at Appendix F.

In completing this form, the following should be borne in mind:

- Delinquent beneficiaries (item 5) refers to the number of beneficiaries who have defaulted on one or more repayments and *currently* have repayments overdue. If a beneficiary defaults on one or more payments, but later catches up and makes good all overdue payments, then they are no longer delinquent. Hence, no cumulative (year-to-date) total is included.
- In calculating the numbers of full-time office staff and field officers (items 7 and 8), part-time workers can be counted as fractions. For example, if there are two field officers working half-days, together they can be counted as one full-time officer. Item 9 is equal to item 7 plus item 8.
- The number of loans outstanding (item 10) is equal to the figure of total loans disbursed, year to date (see item 18) plus any unpaid loans carried over from the previous year, minus total loans repaid in full (item 18). Where loans have been written off (item 39), these should also be subtracted if (and only if) the implementing agency is no longer making an active effort to recover the loan.
- The total unpaid balance of loans with payments past due (item 35) can be calculated by consulting the beneficiary records of all those with payments overdue. The total amounts (interest and capital) still owed by all these beneficiaries are added together to produce this figure.
- The outstanding portfolio (item 36) can be calculated by adding the total interest due (item 26) and the total capital due (item 30).

Quarterly Statement

The quarterly statement includes a detailed financial statement, a summary of the key performance indicators, and a narrative report describing the progress of programme implementation over the three months prior to the issuance of the report. The narrative report should include beneficiary impact assessments, focusing on what the outcomes of the programme have been in terms of achieving its goals.

A blank form for the quarterly report is provided at Appendix G.

Annual Report

The annual report includes both a detailed financial statement for the year and a compilation of the information contained in

the monthly reports. It should also include a narrative section summarising the narratives included in each of the quarterly statements, and focusing on the outcomes of the programme.

A blank form for the financial statement which can be used for both quarterly and annual reports is provided at Appendix H.

Logical Framework

The use of logical framework analyses is now increasingly common and if carefully used can be a powerful tool both for ongoing monitoring and evaluation of the project and for reporting to government and funding agencies. The logical framework is a simple table that allows the implementing agency to measure its progress in moving towards its stated objectives.

Figure 2 shows a how a logical framework is constructed.

The narrative summary provides a brief description of the goal, purpose, output or input. The objectively verifiable indicators are the signs that the goal or purpose is being reached, that the input is being made or that the output is being produced.

The sources of verification are the means of obtaining information about the objective indicators. The assumptions and risks are the assumptions upon which the analysis is based and the risks entailed in making those assumptions.

For example, a specific goal of the programme may be 'to provide young people with the necessary skills to start and run their own businesses'. The objectively verifiable indicator could be that 'within one year of starting the programme, 80 per cent of beneficiaries should be running successful, sustainable businesses'. The source of the verification would be reports sent in by the beneficiaries themselves, confirmed by field visits to the sites of the businesses, to observe their day-to-day operations. Assumptions could be that the economy is stable, inflation is under control and there will be no major political changes. A risk could be that the staff remain with the agency rather than defecting to other employment.

The logical framework is a continuously evolving document which should be added to and rewritten as and when new ideas emerge

Figure 2: Logical Framework

Stage	Narrative summary	Objectively verifiable indicators	Sources of verification	Assumptions and risks
Goal	The wider problem the programme solves within higher-level objectives	The quantitative and qualitative ways of measuring or judging goal achievement	Monitoring means for measuring or judging goal achievement	External conditions needed to achieve the higher-level objective
Purpose	The direct effect of the programme needed to achieve the goal	The quantitative and qualitative ways of measuring or judging purpose achievement	Monitoring means for measuring or judging purpose achievement	External conditions needed to achieve the goal
Inputs	The precise activities to be completed to produce the outputs	The resources needed to perform each activity	Monitoring means for measuring activity completion and the use of resources	External conditions needed to achieve each output
Outputs	The specific outputs of the programme to achieve its purpose	The quantitative and qualitative ways of measuring or judging output achievement	Monitoring means for measuring or judging output achievement	External conditions needed to achieve purpose
Budget				

or new information comes to light. Ideally, it should be posted on the wall of the implementing agency's office.

Minutes of meetings and evaluation reports

The minutes of meetings, especially those of the Management Advisory Board, are useful means of monitoring the programme during implementation.

If desired, a mid-term evaluation and a terminal evaluation can also be done. These would be compiled on the basis of the various other monitoring and evaluation tools, as well as any other relevant inputs.