

ADA, BRS, GTZ and the Microinsurance Network (Performance Indicator Working Group), are involved in the Performance Indicators initiative that aims to:

- Strengthen awareness towards performance analysis and monitoring;
- Share information and knowledge necessary to monitor performance and to increase transparency; and
- Develop tools that help providers to aim for viability.

#### TRAINING COURSES

An important part of this initiative is capacity building. In 2006 and 2007, ADA and BRS organised two first workshops in Luxemburg. Nine key principles and ten key indicators for microinsurance - that are valid for all types of microinsurance products and distribution methods - were established and tested. Joined by GTZ in 2008 and in collaboration with INAFI International and its regional offices, further training courses were organised in India, Peru, Senegal, Belgium and Kenya.

Different modules are available:

**Introduction:** Performance Indicators in Microinsurance for support organisations, focus on interpretation of key indicators and importance of key principles, (1 day)

**Beginners:** Performance Indicators in Microinsurance for practitioners not yet experienced in microinsurance, focus on filling out the factsheet (3 days) Available end of 2009

**Advanced:** Performance Indicators in Microinsurance for practitioners experienced in microinsurance, focus on analysing own data (2,5 days)

**TOT:** Training for local microinsurance networks and training institutions to deliver training courses (4 days) Available end of 2009

The training courses will be available in English, French and Spanish.

For more information, go to the Performance Indicator Working Group page on [www.microinsurancenet.org](http://www.microinsurancenet.org) or visit [www.microfact.org](http://www.microfact.org)

Copyright © June 2009

# Financial Performance Indicators for Microinsurance - Summary Note

This is a second version of a previously published summary note on Performance Indicators for Microinsurance Practitioners (2007). This summary note is available in English, French and Spanish.

## MEASURING PERFORMANCE IN MICROINSURANCE

Measuring performance requires the availability of quantitative data, which can be analysed and interpreted, and thus provides an overview of the microinsurance programme in question. Data accuracy and sound data collection principles are a basic requirement for any analysis and interpretation to be representative and precise.

## SEVEN DIMENSIONS OF MICROINSURANCE ANALYSIS

The following dimensions aim to integrate all aspects of a microinsurance scheme:

1. Microinsurance Organisational Structure
2. Marketing and Distribution
3. Financial Management and Viability
4. Risk Management
5. Investment Management
6. Operations Management
7. Economics, Client Value and Service

Every dimension could be associated with a department in a microinsurance organisation. Most providers would not have a separate department for all these different dimensions. Therefore, it is important that a dedicated person is responsible for each dimension in order to guarantee that all activities are monitored diligently and corrective measures can be taken, if necessary, with only short delays.

These dimensions should be applied as a whole to all those involved in providing microinsurance, they can also be analysed for the components of each of the partners involved in delivering microinsurance.

## THE KEY MICROINSURANCE PRINCIPLES

Before calculating microinsurance performance indicators, it is important to integrate a set of principles. These principles are not to be mistaken for the principles of insurance, but are principles of good management and a priori conditions for accurate performance measurement.

The nine key principles are:

1. Separation of data
2. Collection of relevant and accurate data
3. Production of financial statements
4. Calculation and setting up premium and claim reserves
5. Efficient claims monitoring
6. Clear investment policy
7. Right technical insurance expertise
8. Transparency
9. Client focus

A couple of questions help to determine if these principles have been correctly implemented and the answers will help the programme managers to identify weaknesses or implement necessary improvements.

## THE KEY PERFORMANCE INDICATORS

If the key principles are followed, the calculation of ratios and performance indicators is easier and provides an accurate picture of the performance of the microinsurance scheme.

This set of indicators is not exhaustive but should be considered as key for performance analysis for microinsurance schemes. This set does not include social performance indicators, but they will be discussed and included at a later stage in the process.

The ten indicators can be grouped into four categories:

### 1. PRODUCT VALUE

#### Net Income Ratio

##### Definition

This ratio shows how profitable a microinsurance programme is: "One of the most important indicators is the microinsurer's net financial result or net income since this reflects a summary of all activities in the period reviewed. To measure net income, an accurate income statement on an accrual accounting basis has to be produced, which exhaustively reflects all costs of administering the scheme, depreciation of equipment, reserve changes, and so on.<sup>1</sup>"

How to calculate it

$$\text{Net Income Ratio} = \frac{\text{Net Income}}{\text{Earned Premium}}$$

With

- Net income (prior to non permanent subsidies) = Earned premium + investment income – incurred claims – incurred expenses.
- Earned premiums<sup>2</sup>= Premium income (not cash premiums) – change in Unearned Premium Reserve (UPR).
- Incurred claims<sup>3</sup>= Cash claims + change in reserves = cash claims + changes in Incurred But Not Reported Reserve (IBNR) + change in Claims In Course of Settlement (CICS) + change in Accrued Liability Reserve (ALR).
- Change in a reserve = reserve level at the end of the current accounting period less reserve level at the end of the previous accounting period.<sup>4</sup>

#### Incurred Expense Ratio

##### Definition

This indicator points out how efficient the delivery of microinsurance is. Good product value can "only be achieved with a low expense ratio, which is the proportion of the premium earned in a given period consumed by incurred expenses in the same period."

How to calculate it

$$\text{Incurred Expense Ratio} = \frac{\text{Incurred Expenses}}{\text{Earned Premiums}}$$

With

- Incurred expenses (before subsidies or grants) should reflect all actual expenses incurred in the accounting period, including amortisation of equipment, depreciation, and commissions. This may or may not be equal to cash expenses.
- Earned premiums<sup>5</sup>= Premium income (not cash premiums) – change in Unearned Premium Reserve (UPR).

#### Incurred Claims Ratio

##### Definition

This indicator indicates how valuable the programme is to the insured. It is "defined as total incurred claims divided by earned premium in a given period.<sup>6</sup>"

How to calculate it

$$\text{Incurred Claims Ratio} = \frac{\text{Incurred Claims}}{\text{Earned Premiums}}$$

With

- Incurred claims<sup>7</sup>= Cash claims + change in reserves = cash claims + changes in Incurred But Not Reported Reserve (IBNR) + change in Claims In Course of Settlement (CICS) + change in Accrued Liability Reserve (ALR).
- Earned premiums<sup>8</sup>= Premium income (not cash premiums) – Change in Unearned Premium Reserve (UPR).
- Change in a reserve = reserve level at the end of the current accounting period less reserve level at the end of the previous accounting period.

### 2. PRODUCT AWARENESS AND CLIENT SATISFACTION

#### Renewal Rate Ratio

##### Definition

This ratio helps to determine how satisfied the insured are. It is the proportion of those clients that renewed to those that could potentially renew or were eligible to renew: "The renewal rate applies specifically to term products (products with a fixed term of coverage such as one year). It is defined as the percentage of clients that had coverage in the previous year and are still eligible for renewal, who are renewing their term coverage. It reflects (among other things) the satisfaction of the client once the term product has been purchased." For long term products, the retention rate is a similar indicator.

How to calculate it

$$\text{Renewal Rate Ratio} = \frac{\text{Number of Renewals}}{\text{Number of Potential Renewals}}$$

With

- Number of renewals: Number of policies which were actually renewed.
- Number of potential renewals: Number of policies that could be potentially have renewed excluding those that have become ineligible due to old age, death, or due to other reasons.

1 Garand and Wipf, 2006: 327.

2 Note that a change can be positive or negative. Examples: 1) If the Premium Income is 1,000 and the Change in Unearned Premium Reserve is 100. Then the Earned Premium is 900 (1,000 - 100 = 900). 2) If the Premium Income is 1,000 and the Change in Unearned Premium Reserve is -50. Then the Earned Premium is 1,050 (1,000 - -50 = 1,050).

3 Note that a change can be positive or negative. Examples: 1) If the Claims Paid are 1,000 and the total net Change in Claims Reserves is 150. Then the Incurred Claims are 1,150 (1,000 + 150 = 1,150). 2) If the Claims Paid are 1,000 and the net Change in Claims reserves is -75. Then the Incurred Claims are 925 (1,000 - 75 = 925).

4 Garand and Wipf, 2006: 329.

5 See Footnote 5

6 Garand and Wipf, 2006: 330.

7 See Footnote 6

8 See Footnote 5

9 Garand and Wipf, 2006: 324.

10 Garand and Wipf, 2006: 330.

11 Garand and Wipf, 2006: 322.

## Coverage Ratio

### Definition

“As an indicator of marketing effectiveness, the participation rate [coverage ratio] refers to the proportion of eligible members of a target population participating in the microinsurance programme at a given point in time.”<sup>11</sup> It is the proportion of the target population which is covered by the microinsurance scheme at a specific point in time.

How to calculate it

$$\text{Coverage Ratio} = \frac{\text{Number of insured}_n}{\text{Target population}_n}$$

With

- Coverage Ratio = Penetration Rate = Participation Ratio.
- Number of insured<sub>n</sub>: Number of insured at the time of analysis.
- Target population<sub>n</sub>: Target population at the time of analysis.

## Growth Ratio

### Definition

This ratio reflects the growth of activity from one particular period to another.

How to calculate it

Growth can be measured in several ways, one method being the measurement of the increase in number of scheme participants:

$$\text{Growth Ratio} = \frac{(\text{Number of insured}_n - \text{Number of Insured}_{n-1})}{\text{Number of Insured}_{n-1}}$$

With

- Number of insured<sub>n</sub>: Number of insured in the current period.
- Number of insured<sub>n-1</sub>: Number of insured in the previous period.

## 3. SERVICE QUALITY

### Promptness of Claims Settlements

#### Definition

This ratio indicates the time spent on settling benefits or the time passed between the date of the event reported (or the event incurred, for example, in case of health insurance) and the benefit payment: “The time to payout - how many days it takes for a client to receive a payment after the occurrence of an event.”<sup>10</sup>

How to calculate it

Calculate the percentage of claims paid within each interval:

Interval	Number of claims	% of claims
0 to 7 days	___	___%
8 to 30 days	___	___%
31 to 90 days	___	___%
More than 90 days	___	___%
	<b>Total # of claims</b>	<b>100%</b>

## Claims Rejection Ratio

### Definition

This indicator rates the proportion of claims rejected out of the total of claims reported and reflects three aspects: How well did the organisation communicate information about the product? How reasonable is the microinsurance claims settlement policy? How good is the product design?

How to calculate it

$$\text{Claims Rejection Ratio} = \frac{\text{Number of Claims Rejected}}{\text{All Claims Reported}}$$

## 4. FINANCIAL PRUDENCE

### Solvency Ratio

#### Definition

This ratio indicates how strong the insurance programme is. It relates admitted assets and liabilities by dividing assets of the microinsurance scheme by its total liabilities. Clearly this needs to be over 1 for the scheme to be technically solvent.

How to calculate it

$$\text{Solvency Ratio} = \frac{\text{Admitted Assets}}{\text{Liabilities}}$$

With

- Admitted Assets: The insurance regulator should normally provide a list of admitted assets. In absence of a regulator’s definition, use your own definition and judgement of “high quality” assets (e.g. government securities, high grade bonds and mortgages, cash and cash equivalents, accrued interest of higher grade investments, etc.)
- Liabilities: Liabilities include claims reserves, incurred expenses, and accumulated savings with accrued interest (generated by microinsurance products with savings features) but exclude capital and member equity. If the microinsurer cannot calculate reserves, then the true liabilities are not known.

### Liquidity Ratio

#### Definition

The liquidity ratio is the amount of cash and cash equivalents in proportion to short term obligations of the programme. It determines the capacity of the programme to pay its claims and expense obligations in the short term.

How to calculate it

$$\text{Liquidity Ratio} = \frac{\text{Available Cash or Cash Equivalents}}{\text{Short-term Payables (3 months)}}$$

With

- Available cash or cash equivalents: Total cash available and other assets easily convertible into cash.
- Short-term payables (3 months): Total payments forecast between zero and three months from the time of the calculation.

NOTES:

## MORE INFORMATION

More information on the key principles and performance indicators can be found in the toolkit PERFORMANCE INDICATORS FOR MICROINSURANCE.

The toolkit consists of the handbook on Performance Indicators for Microinsurance and a Microinsurance factsheet, designed to compliment each other.

The MICROINSURANCE FACTSHEET is an easy to use Excel workbook that generates the ten key performance indicators.

The PERFORMANCE INDICATORS HANDBOOK explains the key principles and performance indicators in more detail, and can be used to interpret the factsheet results.

The toolkit available in English, French and Spanish can be downloaded at [www.microfact.org/microinsurance-tools](http://www.microfact.org/microinsurance-tools)