

5

Water, Sanitation and Microfinance Toolkits

WASH Financial Product Portfolio Management



COLLABORATIVELY
CREATED BY

MicroSave
Market-led solutions for financial services

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Acknowledgments

Thanks to the support and vision of our generous partners, we are providing the tools necessary to jump start financial institutions and others within the sector to create access to water and sanitation loans for the world's poor. These partnerships are supporting the creation of scalable and sustainable models that will accelerate access to safe water and sanitation throughout the developing world. Collectively, our work is transforming the future with the most basic of needs – water and a toilet.



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List of Acronyms

FI: Financial Institution

IGA: Income Generating Activity

KYC: Know Your Customer

MIS: Management Information Systems

NGO: Non-governmental Organization

OTRR: On-time Repayment Rate

PAR: Portfolio at Risk

SIS: Staff Incentive Scheme

WASH: Water, Sanitation and Hygiene



Preface

Overview of the Water, Sanitation and Microfinance Toolkits

Water.org and *MicroSave* have jointly developed a series of water, sanitation and hygiene (WASH) microfinance toolkits to provide the information and tools necessary for financial institutions (FIs) to develop products for financing WASH investments. The toolkits present essential information, principles and practices for successful development of WASH financial products and are designed to be applicable across a variety of markets, lending methodologies and business models.

Toolkit 1: Introduction to Opportunities in WASH Finance

Provides global WASH context and information on household WASH needs and demands for WASH financing; introduces the major WASH systems prevalent among low-income populations and explains which are suitable for loan products; provides an overview of WASH stakeholders with which FIs might collaborate to support their WASH financial products; and identifies potential challenges and keys to success.

Toolkit 2: WASH Financial Product Development

Explores the product development process for researching, designing and launching successful WASH financial products, including market research, product design and pilot, and preparation for product rollout.

Toolkit 3: WASH Financial Product Marketing

Explores different marketing strategies and tools to ensure effective demand generation, particularly given high latent demand for WASH financing in the developing world; helps FIs create a marketing plan and explores the cost benefit of a marketing campaign.

Toolkit 4: WASH Finance Process Mapping, Risk Management, Pricing, Internal Audit and Controls

Provides the tools for FIs to design effective processes for product delivery, introduces the concept of process mapping and helps FIs identify the process risks in delivering WASH products. This toolkit also includes pricing a WASH loan product and instituting audit and control measures for WASH finance.

Toolkit 5: WASH Portfolio Management

Discusses keys to managing sustainable WASH products, including staff incentives, credit risk assessment, and delinquency management.

Structure of the Toolkit

WASH Financial Product Portfolio Management is the fifth of five toolkits developed by Water.org and MicroSave to strengthen and expand the financial sector's capacity to offer sustainable products designed to finance WASH investments. The content draws heavily from Water.org's practical experience, providing technical assistance to FIs over the past decade through its WaterCredit initiative, and MicroSave's work providing consulting services to FIs. This toolkit builds upon the previous four toolkits and discusses the keys to managing sustainable WASH products, including conducting credit assessments, managing delinquency, and managing staff incentive schemes.

The objectives of this toolkit are to:

- assist FIs in developing a robust credit assessment policy system
- define delinquency, and help FIs identify and remediate cases of delinquency
- discuss and help FIs plan for loan loss provisions and loan loss reserves
- explain the importance of staff incentive schemes
- outline the general process of developing an effective and appropriate staff incentive scheme

This toolkit is divided into three chapters:

[Chapter 1](#) introduces the idea of credit assessment policies and explains why it's a necessary process to have in place. It delineates the components and different methods of credit assessment.

[Chapter 2](#) defines delinquency and its many types, explains the causes and consequences of delinquency, and provides steps for delinquency management. It also shares some important tools for measuring portfolio delinquency and helps FIs provision for loan loss.

[Chapter 3](#) discusses the importance of developing staff incentive schemes for WASH lending. It also outlines the necessary factors to consider when designing a scheme to ensure that the scheme requirements are attainable and fair.



About Water.org

Water.org is a non-profit organization that has transformed the lives of more than two million people in Africa, South Asia, Central America and the Caribbean by providing access to safe water and sanitation. Founded by Gary White and Matt Damon, Water.org pioneers innovative solutions, such as WaterCredit, to help solve the global water crisis, giving women hope, children health and communities a future.



WaterCredit by Water.org

WaterCredit is a microfinanced-based solution that first began in Bangladesh in 2003 and has since expanded to nine countries. Under WaterCredit, financial institutions have the flexibility to use their existing lending methodologies to develop products that finance locally appropriate WASH facilities. To date, WaterCredit loans for water access have financed network connections, protected wells and boreholes, water pumps, rain water harvesting systems, and storage tanks. Loans for sanitation access have financed toilet and latrine construction, septic tank installation and sewage network connections. Learn more at <http://water.org> and <http://watercredit.org>.

About MicroSave

MicroSave is a consultancy organization that offers practical, market-led solutions to financial institutions and corporations focused on bringing value to the base of the pyramid. *MicroSave* is at the forefront of efforts to move financial services from a product-led to a market-led approach. The market-led approach focuses on putting customers at the center of the business, improving customer loyalty, establishing more profitable organizations and ensuring greater developmental impact. *MicroSave* works with investors, donors, financial institutions, private foundations, corporate businesses and regulators to enable them to deliver the high-quality, affordable financial services that are essential for sustainable and inclusive growth. The organization's expertise includes strategy development and governance, product and channel innovation, organizational strengthening and risk management, investment and donor services, research, training and dissemination of information and best practices. *MicroSave* has implemented projects across Africa, Asia and Latin America. Learn more at <http://www.microsave.net/>.



1

Client Credit Assessment for WASH Loans

This chapter has been created to help FIs delivering WASH credit products develop a robust credit assessment policy system which supports the organization in achieving their strategic objectives. This chapter covers the various aspects of a client credit assessment, which an FI will need to consider before offering WASH credit products. This includes:

- » the importance of a documented credit policy for WASH financial products,
- » components of a credit assessment exercise, and
- » the different methods/options of credit assessment for any FI.

In the simplest terms, the credit assessment determines the ability and intent of a prospective loan seeker to repay a loan. The process starts from the point when an applicant applies for a loan and is completed when the loan application is either rejected or accepted. In cases where loans are offered on subsidized rates for specific purposes, the credit assessment exercise also considers the client's need and his/her eligibility in addition to considering his/her repayment capacity.

For most FIs it is recommended to have a documented credit assessment policy based on the local context and risk appetite of the institution. FIs involved in WASH loans must develop their credit assessment keeping in mind the special nature of the loan, thus criteria like home ownership, availability of space for construction, and site inspection would be included alongside the usual criteria (e.g. cash flow analysis, household expenses, alternate sources of income, etc.).

A well-documented credit policy is a useful tool for any FI to:

- **Ensure an unbiased and uniform approach in assessing client loan applications.** A well-documented credit policy can be used to train the staff involved in the credit assessment process. It will also help in developing suitable loan application forms to collect the right data and remove objectivity in the analysis. FIs engaged in WASH lending can also use it as a tool to focus their services to the desired target groups.
- **Manage the overall risk exposure of the institution.** A credit policy document can be used by the top management to shape the portfolio of the institution as per their strategic objectives or market forecasts.
- **Act as an essential training tool for credit operations staff.** Credit staff will be the major players in conducting the credit assessment of the prospective clients.

A well-documented credit policy with a trained credit staff is critical to maintain high repayment rates and a healthy portfolio. The basic definition and objective of the credit assessment remain unchanged by the nature of the loan product but the procedures and activities must be modified to match the different delivery methods. As most FIs have income generating activity loans as their flagship products, their credit policies will need to be reviewed and modified if they decide to offer WASH loan products. In the case of FIs completely dedicated to offering WASH credit products, the credit assessment policies will need to be formulated from scratch, based on the requirements of delivering WASH products.

Credit Assessment Components

Credit assessment of clients for WASH loans generally consists of three major components: data collection, data interpretation, and the decision-making model.

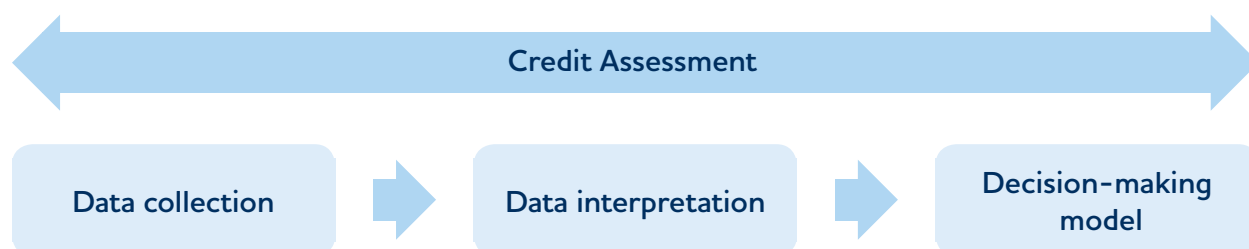


Figure 1: Credit assessment components

Data Collection

Data collection is the first step in a credit assessment. It is also one of the most crucial and labor intensive components. Due to the manual nature of this exercise, substantial training, monitoring and precautions are needed to achieve accurate collection of data.

Data Sources

Data required for the credit assessment can be collected from the following possible sources:

- **Self-disclosure:** This is one of the easiest and widely used means for collecting data about prospective clients. Data can be collected using “client application forms” with client signatures or through interviews during staff visits to the client.
- **Documents:** This is the most reliable and widely used source of data for credit assessment. Legal documents, home ownership certificates, ID cards, bank statements, etc. can all be used to distill useful information for the credit assessment of the prospective client. Commonly the ownership documents of assets are also used for collateral-based WASH lending.
- **Credit bureau:** Credit bureaus, where they are active and offer access to data at reasonable rates, can be used to collect credit history data of a prospective client.
- **Inspection:** “Seeing is believing.” For WASH loans (especially water connections and loans to build toilets) inspection is an important step to determine the suitability of a particular construction activity at the client’s location.

- **WASH non-governmental organizations (NGOs) or other technical sources:** If the FI does not have internal WASH technical expertise, then it will have to ask experts (like WASH NGOs) to evaluate and advise on the suitability of a particular WASH technology for the area, and the cost of obtaining that technology (such as labor and material costs for constructing a toilet, which type of toilet technology is suitable for the region, and servicing considerations and costs).

Example of an Assessment Process

Loan application filling and Know Your Customer (KYC) documents

An FI loan officer visits an interested client household and assists in filling out the loan application form for the individual borrower. He/she collects the following documents to meet the KYC norms of the regulator:

- Photo Identity Card
- Proof of house address
- Photograph of the client

KYC documents check and credit bureau check

The loan application and the KYC documents are verified by a branch admin staff to ensure they are complete and accurate. Based on the information collected in the loan application, a credit bureau check on the applicant is conducted to test past credit history. The credit bureau check at this stage helps the FI to weed out clients with a poor credit history before the more time-consuming process of credit appraisal or construction feasibility check is started.

Credit appraisal visit by loan officer

If the applicant passes the credit bureau check, the loan officer visits the client to conduct a detailed credit appraisal/investigation. This step includes:

- Completing an applicant's detailed household cash flow analysis
- Collecting evidence on ability to repay the loan, including proof of income, credit records with other FIs, savings balance at banks etc.
- Collecting evidence on good character of the applicant: Reference check with neighbors, checking payment of utility bills (like 3 months electricity, water or telephone bills)

(continued)

Example of an Assessment Process, continued

Project feasibility check

The above steps are similar to the income generation loan of the FI but this step is specifically for WASH loans. The WASH technical officer will visit the client once the loan officer has conducted his visit and has given his recommendation. The technical officer will collect the following information:

- Suitability of the type of water or toilet connection for the particular geographic area
- Availability of construction materials and mason services
- Justification that the loan size requested is suitable for the planned project, especially for the location of the project
- Availability of local masons who are trained to build the required WASH technology

While the above steps have been listed separately, the actual implementation of such steps may be combined into fewer visits to the household based on existing FI operational policies and process efficiencies. Please note that this process is only for individual borrowers – a group borrowers' assessment process will look different.

Once the data has been collected and documented it is crucial to check the consistency of the data. This can be accomplished through random verification of first-hand data collected by a second staff member, designing forms to include cross verifiable fields, or detailed scrutiny of the documents.

Refer to Toolkit 1 of this series for different toilet types and their suitability

Data Interpretation

Once the data has been collected and entered into the relevant templates, it is ready to be analyzed to form a basis for loan proposal approval or disapproval. A credit assessment model analyzes data from multiple entered sources and gives a recommendation to either reject, accept, or further investigate the loan proposal. One common example of data interpretation is a Credit Scoring Tool, which utilizes the various data collected to create a logical interpretation, normally in the form of a score. Because the importance of factors varies according to the FI, weights are attached to the factors. Some factors may have very low weights in regard to the decision, while others may be designated as non-negotiable, which if not complied with will directly result in rejection of the application.

For example, home ownership could be a non-negotiable factor for a loan to support a borehole well since decisions on building WASH infrastructure in a house can only be taken by the owner. Therefore, if the prospective client does not own a house his/her proposal will be rejected even if the proposal scores well overall.

Similarly if management considers monthly income to be a more important factor than land ownership, monthly income will be given more weight. Thus a client with better monthly income and lower land holding is more likely to be approved for a WASH loan. Depending on the strategic choice of the FI, the threshold credit approval score for WASH loans can be relaxed in cases where the WASH loans are given to existing clients of the FI since their credit history is known and is generally positive.

Decision Making

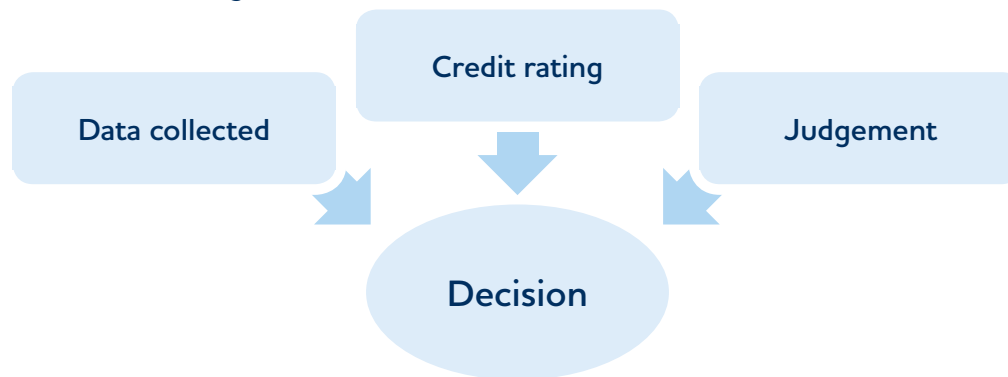


Figure 2: Factors contributing in decision making model

The last step of the credit assessment process is making the final decision on whether the client should be offered credit or not. At this stage the person responsible for making the decision should have the findings from the data interpretation stage, along with the field observations and recommendations.

The decision making authority can be either a single person, like a branch manager, or a group of people, like a credit committee. For WASH loans, FIs can follow the usual practice that they employ for normal income generation loan credit policy.

WASH Credit Approval in an Indian FI

XYZ Finance Services, an FI operating in South India, follows a 3-tier credit approval method for its WASH portfolio. The FI offers WASH loans to existing group loan clients, therefore all the WASH loan clients have an existing income-generating loan balance. For credit approval, the FI considers the total outstanding loans including the WASH loans which the client will have. This total will decide the level of authority which approves the loan amount.

Total loan outstanding (in USD)	Approving authority
Up to \$246	Branch Manager
Up to \$326	Area Manager
Up to \$410	Regional Manager

As the outstanding loan amount increases, credit risk increases as well, so a higher authority is required to approve the higher loan. This ensures the loan application is thoroughly verified.

Methods of Credit Assessment

This section will explain the types of credit assessment methods which can be deployed by FIs using the same core components used in the credit assessment step. Some methods of credit assessment might include:

- Group assessment
- Cash flow based assessment
- Collateral based assessment
- Credit history based assessment

Group Assessment

The general rule of credit assessment is that the value of the reduction in risk should be higher than the investment required to conduct a credit assessment. While the value of reduction in risk could be debated, it is wiser to invest more time and effort in collecting data for individual loan applications seeking higher loan amounts than to invest the same time and effort for group loan applicants seeking smaller loan amounts. For this reason, most FIs prefer giving small loans through the more efficient and leaner mechanism of group-based lending.

In group-based lending, the group guarantee acts as collateral reducing the overall risk when compared to the individual lending methodology. The

group guarantee makes up for the lack of collateral and allows FIs to save costs compared to the more detailed and expensive assessments required for individual customers. The actual process of credit assessment in a group setup may change per the policies of the organization.

Example of Group Credit Assessment

ABC FI conducts group based assessments for its small-sized group WASH loans.

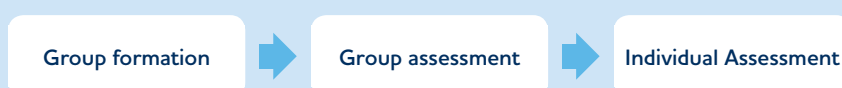


Figure 3: Example of group credit assessment

Group formation:

At ABC, credit assessment starts right from the time of group formation. The FI believes that forming a strong group is the most crucial step in their group-based lending. Thus, field staff are advised to monitor the process of group formation and strictly verify whether the formed groups comply with the criteria set by ABC. Any groups that do not comply with the set standards are rejected by field staff.

Criteria considered by ABC for group formation include: number of members, acceptance of group guarantee, age, area of residence, minimum number of years in current residence, proximity of group members, absence of any blood relatives within a group, income band, occupation type, and no cases of multiple borrowers. Additional criteria for group formation, like size of house and size of the construction budget, also need to be considered for WASH loans.

Group assessment:

Once the groups have been formed, the group assessment begins. This assessment involves training around group rules and regulations, policies of ABC and the concept of group liability. Group members must pass a test before they are allowed to apply for WASH loans.

Individual assessment:

Once the group has passed the test, the field staff conducts one last round of assessment by visiting the house of each WASH loan client with an engineer to verify the details of the client and the site before final approval.

In conducting a group credit assessment, the following parameters should be considered:

- **Past group performance:**
 - *Repayments.* The incidences of past defaults should be within organizational guidelines.
 - *Group discipline.* Data around frequency of group meetings, attendance, and action taken against absentees will provide an idea of group discipline.
 - *Stability.* Incidences of group deformation-reformation and drop-outs should be within tolerance limits set in the credit policy.
 - *Documentation.* All documentation should be complete and made available.
- **Group homogeneity:** Homogeneity of the group is important for the inherent strength of the group and should ideally be a prerequisite for group formation.
- **Observation of group proceedings:** If a group is disciplined in conducting timely meetings and adhering to the agenda of the meeting, it is more likely to be disciplined in ensuring repayments.
- **Record of group leadership:** A routine and consistent change of leadership is a healthy sign of an active, stable group.

Cash Flow Based Assessment

Cash flow based assessments are widely used by FIs around the globe as a preferred credit assessment method for individual loans. The underwriting of the loans is based on the net surplus cash flow generated every month. The general rule of cash flow based assessment says that the equated monthly installment of the loan should not be greater than 40% of the net income of the individual, and the cash flows should ideally match the repayment schedule. In cases of standard income generating loans the cash flow of the specific business is evaluated for which the loan is granted. This is not possible in cases of a WASH loan as it cannot be directly linked to a business activity. Thus the most optimal way to use a cash flow based assessment for WASH clients is to evaluate the overall cash flows of the client, including all income sources, to estimate his/her repayment capacity. For example, if a prospective client has a monthly income of 10,000 units from three business lines (each having an income of 5000, 2000 and 3000 units respectively), the maximum permissible loan equated monthly installment to which this client can be exposed will come out to be 4000 units per month (40% of total monthly income).

Collateral Based Assessment

Collateral based assessments help determine the repayment capacity of the client based on the value of the collateral offered. This method is more suitable when the loan amount is large. Large loan amounts may require FIs to have protection against credit risk in addition to the household cash flow analysis and traditional joint liability. Loans for installing tube-wells or roof-water harvesting structures are examples where the loan sizes may be higher. Assets like land and vehicles are the most common type of collaterals used by FIs. FIs need to remember that this type of assessment requires an additional step of registering the collateral, and customers should know that they will be responsible for the accompanying registration costs. It is also important to remember that using collateral based credit assessment for building a WASH portfolio limits the outreach to only those potential customers possessing the necessary collateral. Requiring formal collateral increases the operational costs due to the costs incurred in registering the collaterals legally. FIs in the microfinance sector have used flexible collateral like business stock or household/business assets which are more easily available. In spite of this, FIs are recommended to use traditional credit assessment methods like group liability and cash flow analysis wherever possible as these are more suitable for achieving scale.

Credit History Based Assessment

A credit history based assessment is generally used by FIs using group lending methodology and which have a large customer base of low income people with existing credit history of three or more loan cycles. This large base offers the opportunity to cross sell the WASH loans to existing customers. Since the FI already has the record of the credit history and other details of the client, it does not need to spend too much time or effort in gathering new data from the client. FIs generally combine this method with their existing credit assessment method which will be one of the preceding three methods mentioned in this section. For example, Grameen Financial Services, an FI in India, gives WASH loans only among its group loan clients. The group liability which exists for the income generation loans continues for the WASH loans as well.

2

Introduction to Delinquency Management

In most cases, WASH lending for household improvements has been shown to be very low risk, with Water.org local partner FIs normally experiencing more than 99% repayment. However, delinquency management is still an important consideration in many situations. The objective of this chapter is to give FIs an overview of WASH loan delinquency management. In this chapter we will cover the following seven areas, which will help to understand measurement and management of delinquency:

- » Definition of delinquency
- » Different types of delinquency (product-related and credit-related)
- » Costs and consequences of delinquency and default
- » Measuring delinquency – common delinquency measures (aging, portfolio based indicators)

- » Causes of delinquency in WASH financial products
- » Cautions to prevent delinquencies in WASH products
- » Steps for delinquency management

Understanding Delinquency

Delinquency means “breaching of a promise.” The promise can have many different dimensions of obligation like time, value, performance or non-performance of certain acts, etc. One of the biggest risks for an FI is credit risk, which is defined as the un-fulfilment of credit obligations by the customer as per defined terms and conditions. This condition of un-fulfilment of terms and conditions is known as delinquency. In other words, delinquency means obligations have not been discharged or activities have not occurred within the scheduled time.

Different Types of Delinquency

Based on the source, delinquency can be categorized into two types: credit-related or product-related.

Credit-related Delinquency

Non-fulfillment of credit repayment terms triggers credit-related delinquency. Like other financial products, credit-related delinquency has similar connotations for FIs undertaking WASH finance. The principal amount of loan outstanding is the most important asset for an FI, as it:

- is the largest asset for an FI,
- generates almost all the income (interest and fees),
- is the main product of the business demanded by clients, and
- is the reason for the FI’s existence

Most microfinance loans are not secured by assets that can be seized or sold to recover defaults, with the exception of tank loans for WASH. The expectation to get fresh loans or other services is the major motivation for a client’s prompt repayment. In these circumstances, any serious outbreak of credit-related delinquency can quickly spin out of control, so it is important for FIs to ensure that their loan portfolios are protected.

Product-related Delinquency

In addition to non-fulfillment of credit terms and conditions, performance of a credit linked activity within the defined timeline is equally important, thereby bringing product-related delinquency into the picture. For example, if an FI gives credit to its customer for construction of a toilet in a time-bound manner and within certain specifications and quality standards, and the customer is unable to fulfill such a requirement, then there will be delinquency. Depending on the design and implementation of a WASH loan program, product-related delinquency can often be a greater challenge than credit-related delinquency.

Costs and Consequence of Delinquency

Both delinquency and defaults have inherent costs associated with them, which undermine an institution's sustainability. Some of the costs and consequences of **credit-related delinquency** are:

- De-capitalization of the portfolio (or revolving loan fund)
- Loss of assets (loan portfolio)
- Loss of reputation: the negative effect on cash flow prevents on-time loan distribution, leading to negative hits on client satisfaction
- Postpones/reduces interest and fee income
- Increases costs – collection, provision, interest on future borrowings
- Reduces productivity of assets
- Loss of clients or dissatisfaction amongst clients
- Contagious - creates a bad precedent for other clients who could join the bandwagon
- Lowers staff morale

The costs and consequences of **product-related delinquency** are:

- A product-related delinquency has the potential to trigger a credit-related delinquency if the client is unhappy with the WASH facility.
 - Failure to meet the social objectives of improving access to WASH if the built infrastructure is not being used for the said purpose.
 - Potential loss of donor grant funds or social investor funds if WASH facilities are not actualized.
 - Environmental damage in the case of infrastructure built without proper waste disposal techniques.
-

- Increased cost to the client if delay affects cost of materials or labor.
- Lower staff morale.

Besides the above mentioned consequences and costs, the major loss for a WASH FI would be in terms of loss of reputation for its WASH program and will grossly affect the expansion of the project.

Causes of Delinquency in a WASH Financial Product

Delinquency in WASH loans are caused by a number of factors, some of which are similar for all types of loans, while others are unique and specific for WASH loans. Broadly all the causes of delinquency can be classified into the following categories:

- Borrower-related causes
- Organizational causes – business culture, credit program policies and procedures, management information systems (MIS)
- External causes – natural disasters, economic environment

Borrower-related Causes

Household income: Disposable household income is an important factor to be considered when servicing a WASH loan product. This is primarily because, unlike an enterprise loan where business surplus is used to pay loan installments, there are no explicit cash savings available to fund a WASH loan installment. However, it should be noted that clients do often experience positive economic benefits from WASH facilities such as lower costs related to treating illnesses or a decrease in costs compared with previous methods of meeting a client's WASH needs. Also, in many cases WASH loans are given in parallel to income generation loans so the household can have more than one loan balance. In such cases if the disposable income is insufficient or is wrongly calculated by the FI then the chances of delinquency increase.

Misuse of loan: Most of the microfinance clients have low income and they have multiple demands on any cash inflow into the house. There is a risk of clients misusing the WASH loan either in full or in part for any other consumption activity. This risk is higher in cases where FIs offer a WASH loan at a concessional rate of interest. Clients may unintentionally or intentionally use the WASH loan for other consumption purposes which can lead to product-related delinquency. If misuse of loan funds is a big concern for an FI, certain program design decisions can be made such as disbursing the loans directly to a WASH supplier.

Personal/family crisis: The individual member also can be the reason for loan delinquency. This may be due to events which the member cannot control, such as illness, death, unemployment, carelessness in handling money, failure to maintain a budget, or forgetfulness.

Organizational Causes of Delinquency

Organizational causes of delinquency relate to customer dissatisfaction from service quality or program management. In FIs customer dissatisfaction can lead to delinquency. Some of the major organizational causes of delinquency include:

Delays in supply chain: FIs which offer loans for WASH products (like water tanks, roof water harvesting structures etc.) face the risk of delays in product delivery. Such delays may lead to customer dissatisfaction. Delays may occur due to unavailability of stock or delayed delivery.

Process inefficiencies: Many FIs suffer from operational inefficiencies leading to delays in loan processing and customer service. This factor often also contributes towards creating delinquency.

Poor quality: In cases where the FI provides additional services like providing masons or construction materials, poor quality of the WASH product could lead to dissatisfaction and non-utilization of the WASH infrastructure.

Inappropriate financial products: Inappropriate loan structuring can lead to the inability to make repayments. The most common example of this is where the tenure of the loan is relatively short, resulting in relatively large installments.

Forced loans: The anxiety to achieve disbursement targets result in credit support to poorly assessed borrowers or over-indebting clients with loans that are beyond their needs or repayment capacity. This may cause the field staff to “push” credit quickly, giving loans without proper verification or preparation to achieve the target.

Lack of technical expertise of organizational staff: If the FI does not have the technical expertise to evaluate the construction costs, it may over or underestimate the loan size, either of which can lead to delinquency. Underfinancing loans can lead to improper construction and overfinancing may lead to skimming the loan amount for consumption purposes.

How Does Your Organization Shape Up?

Organizations that view collections as very important are more likely to have a low delinquency rate than are other organizations. Moreover, these organizations view a high delinquency rate as detrimental to their programs and their relationships with constituents and institutional supporters. Sending the message of being fiscally disciplined to staff and clients is critical in setting the tone for the importance of timely collection of loans.

Additionally, it is important to manage risk for construction delinquency. FIs must have the expertise mentioned in the table below, and the information must reach the loan officer level as s/he is the person who is dealing with the customers directly.

Figure 4: Key areas of WASH expertise for risk management

Functional Area	WASH technical expertise
Sanitation	<p>Knowledge of different types of sanitation facilities and their associated costs</p> <p>Ability to identify appropriate technical solutions depending upon client location, type of soil, water table and client preference</p> <p>Knowledge of local construction costs</p> <p>Resource requirement for different sanitation facilities, including knowledge and availability of material and construction workers</p>
Water	<p>Knowledge of different water sources including suitability of the source for a particular geographical context, cost of installation, water treatment, etc.</p> <p>Knowledge of the local regulatory laws related to water extraction and terms and conditions for getting piped networks</p> <p>Local knowledge of cost of construction and resource requirements of the various water facilities, including knowledge of availability of materials and construction workers</p>
Hygiene education	<p>Experience providing community education covering the benefits of clean water, proper sanitation and safe hygiene practices</p>

Steps for Delinquency Management

Actions are guided by the perceived incentives (benefits) and disincentives (costs). If the perceived benefits of being delinquent outweigh the benefits of not being delinquent, clients could become delinquent. Therefore, apart from analyzing the causes, it is also important to understand the cost-benefit analysis of on-time payments and late or no payments from the borrower's perspective. Such an understanding can help in creating appropriate incentives and disincentives, and in controlling delinquency.

In crafting a response to the challenge of consumer protection, FIs may want to consider how the issue of delinquency can hurt the client if not managed in a client-oriented way. Client sensitive delinquency management requires that programs build credit discipline among clients, especially through peers, and in a sensitive manner. Delinquency management is about attitudes, products, processes, systems and commitment. Although some FIs are able to turn around delinquency problems, many struggle to do so effectively.

Step 1: Develop Market-led Products and Services

Conduct market research to understand the needs of your target customers, and develop products and delivery systems that respond to those needs.¹ Continued access to subsequent loans has long been viewed as one of the most important incentives for clients to repay.

The **financial and non-financial services** must be valued by the clients. In other words the services must be market-led, developed and delivered in response to the research and analysis of real demand from the target market. Services should suit clients' real needs, the delivery process should be convenient, the pricing should remain competitive and clients should be made to feel that the institution/project respects and cares about them.

Step 2: Design Appropriate Policies to Avoid Risk Specific to WASH

Poor quality risk: Many FIs that offer sanitation loans do not provide masons or construction products as part of the loan. This is especially true in regions where these services are easily available thereby reducing the risk

10 Steps to Delinquency Management

1. Develop Market-led Products
2. Design Appropriate Policies
3. Establish Delinquency as Unacceptable
4. Create Appropriate Incentives/Disincentives
5. Ensure Effective MIS & Reporting Systems
6. Train Clients and Staff
7. Select Appropriate Clients and Disburse Appropriate Loans
8. Ensure Timely Monitoring
9. Ensure Portfolio Growth is Commensurate with System
10. Conduct Regular Review and Causal Analysis

1 See MicroSave's "Market Research for Microfinance" toolkit for more on this.

of poor quality construction. In such instances, the customers are clearly informed that obtaining high quality of service is their responsibility and the FI may provide some additional support in the form of WASH facility standards or other product guides.

Collaborator risk: FIs may choose to sign service level agreements with WASH manufacturers to ensure a timely supply of the WASH products. These agreements vary in nature but it is recommended that the collaborating agency agrees to be responsible for the product and service quality within certain standards.

Utilization risk: Some FIs offer WASH loans that are disbursed directly to the household with or without certain client preconditions such as digging the pit for their future latrine. In some cases, clients are required to pre-invest their own resources before the loan funds are disbursed to the household. This gives an added level of comfort to the FI that the client is not going to misuse the loan. Alternatively, some FIs choose to disburse the loan amount directly to the WASH supplier to avoid any potential misuse of the loan funds.

Step 3. Position the WASH Portfolio with an Image that ‘Delinquency is Unacceptable’

It is critical for FIs offering WASH products to establish the position that product- and credit-related delinquency is unacceptable. Given the non-repetitive nature of WASH loans, building such an image is difficult as the carrot of the next higher cycle loan does not exist as it does with a typical FI loan. However, a percentage of clients take out more than the WASH loan, so this may manifest itself as a two-loan cycle.

Zero tolerance for delinquency should be driven from the top down in an organization. However, establishing this culture cannot be construed as ‘coercive repayment’. In addition, it is a matter of good operating policy for an FI to have a standard list of extreme situations such as family deaths, the unexpected loss of a family home, or natural disasters that would qualify the borrower for deferred repayment and some other repayment agreement adjustments.

Create discipline in clients through training and by **establishing incentives** for on-time payment **and by establishing disincentives** for delayed payment.

Step 4. Create Appropriate Incentives/Disincentives

Establish an incentive system for clients. This incentive system should use both financial and non-financial incentives to encourage on-time repayments by clients.

- *Incentives*: Connections to approved suppliers, direct training on technical knowledge, help in sourcing of material, design information, estimated construction costs and timelines, usage benefits, etc.
- *Disincentives*: Penalties, stoppage of funds, stoppage of technical support, etc.

Design an incentive system for field staff/loan officers. An incentive system that places the responsibility for portfolio quality on the shoulders of the field officers/loan officers has proven to be very effective as they are in the best position to respond to repayment problems.

Enforce a compassionate approach to tackling delinquency governed by clear procedures for dealing with delinquency. This is particularly important when staff is financially incentivized. Otherwise, staff could potentially engage in undesirable and potentially illegal coercive repayment practices.

Step 5. Develop Effective MIS and Reporting Systems

A MIS should **allow tracking of individual/group loan accounts** and identify delinquency in a timely and proactive fashion. Both financial- and product-related delinquency must be immediately reported and recorded in the MIS, whether manual or computer based, so that rapid follow-up by loan officers, branch managers and others responsible for management of the portfolio takes place.

Step 6. Market the Products, Train Clients and Staff

Ensure that the WASH facility design is simple and communicated in clear, concise, client language. Because there is limited knowledge among low-income customers on how WASH financial products actually work, FIs must incorporate different awareness generation methods to increase knowledge.

Develop the trust of the community. Developing the trust of the community for a WASH program is important because the subject of sanitation and hygiene can be very sensitive and socially complex. As part of investing in a new WASH facility, households are indirectly being asked to change their daily behavior. Ensuring that the FI has a hygiene education activity as part of the overall WASH program can help to build trust and facility behavior change.

Training and support for field officers and other branch staff is essential. The curriculum should include marketing, financial product details, operational processes, reporting requirements, and more. Without this knowledge, it is difficult for the field staff to convey the product concepts to clients and manage the overall field activities of the WASH program.

See Toolkit 2 for more on WASH Marketing

Step 7. Select Appropriate Clients and Disburse Appropriate Loans

Select clients who want to be a client of the institution and see a mutually beneficial relationship. Do not force people to take on loans for WASH improvements if they do not want to. Getting clients to become part of a WASH program when they either do not have the willingness, time or inclination can lead to delinquency and other negative consequences.

Estimate the absorption capacity of a loan before suggesting it to the clients. If there is no basis to support the repayment of the new WASH related debt, then a WASH loan should not be provided since as WASH products are consumption products which often do not directly add to the income of the household.

Avoid people with a history of wilfull default. If a credit bureau exists, using the historical credit data to assess new potential borrowers can be a helpful way to select appropriate clients. If no credit bureau exists, it may be possible for the FI to coordinate and help create a credit bureau.

Step 8. Ensure Timely Monitoring

Develop and implement simple, standardized and transparent procedures that facilitate effective, regular and timely monitoring of WASH loans. Depending on the WASH product design, some FIs may decide not to do utilization checks. For example, when the loan funds are disbursed directly to a WASH supplier, there is often minimal risk of loan misuse. In the case of loans being disbursed directly to households, loan utilization checks are often more important. In this case, FIs may need to create new processes and assign staff time for this activity. Two specific examples of monitoring include ensuring the loan is being used for the correct purpose, and ensuring that the construction is complete. Most commonly, FIs use credit officers to conduct utilization checks but there are other options like an internal dedicated WASH staff, internal auditors, an outside third-party, community-based monitoring from fellow clients or group leaders, and more.

Step 9. Ensure that Growth of the Portfolio is Commensurate with Systems

Delinquency problems often arise when loan portfolios outgrow the FI's administrative capacity. Growth should be demand-led, as supply-led disbursements to meet targets usually result in increased delinquency. For example, when the FI is dependent on a WASH product manufacturer, the growth of the FI must factor in the ability of the WASH manufacturer to also scale up its services. Similarly, if the FI depends on a WASH NGO to generate sufficient awareness to improve utilization of the WASH facility then the

NGO’s capacity to provide quality awareness generation programs in all the new areas must be considered.

Step 10. Feedback and Causal Analysis of Delinquency

A mechanism of gathering feedback from the field level to management level should be developed to ensure minimization of institutional causes of delinquency. The organization must be aware about the clients’ needs and expectations for products and processes. To prevent delinquency FIs should conduct regular analysis of causes (recorded by the staff in field) should develop a strategy based on that analysis. This will also help in improving the financial product, the WASH solution, and in the supporting better processes.

Measuring WASH Portfolio Delinquency

Measuring for credit-related delinquency for WASH credit products will be the same as measuring for any other offered product. In this section we will briefly discuss the financial aspects of WASH product delinquency and how to measure them.

The most important indicators to measure delinquency by FIs for all credit products including WASH products are:

- On-time Repayment Rate (OTRR)
- Portfolio at Risk (PAR)

The formulas for calculating the various repayment-based measures are:

$$\text{On-time Repayment Rate} = \frac{\text{Amounts paid on time (to date, as per schedule)} - \text{prepayments} \times 100}{\text{Amount Due (to date, as per schedule)}}$$

$$\text{Portfolio at Risk} = \frac{\text{Unpaid principal balance of loans with payments past due}}{\text{Outstanding Portfolio}}$$



Some Salient Features of Each Indicator

On-time Repayment Rate (OTRR)

- A measure of credit discipline. The numerator loans due that have been paid on time. It gives instant and unambiguous feedback about promptness of the client in repayment.
- A good tool for day-to-day portfolio management and cash flow management.
- The better the OTRR:
 - the lower the postponement of the interest income
 - the greater the efficiency of portfolio rotation
 - the easier the fund/liquidity management, and the better the staff

Portfolio at Risk (PAR)

- PAR is the most common and popular indicator to measure delinquency in WASH finance institutions.
- It is a more conservative measure of portfolio quality and delinquency and it is the preferred indicator of use.
- PAR attempts to measure the potential risk in a portfolio by using historical data and/or performance indicators of the present portfolio.
- It is based on the key question: if all delinquent borrowers continue to be delinquent (i.e. are to completely default), then how much does the organization stand to lose?
- From this perspective, PAR provides a pessimistic estimate of the risk in a portfolio.
- A decreasing trend in PAR is a positive aspect for an FI.

Measuring Product-related Delinquency

The easiest measure for product-related delinquency can be measured by the utilization rate of the WASH infrastructure or service. 100% should be the target on this measure for all FIs.

Provisioning for Loan Loss

Why are Loan Loss Provisions and Loan Loss Reserves Needed?

There are several reasons for having provisions and reserves:

- Maintaining loans on the books that are unlikely to be repaid overstates the portfolio size (assets) on the balance sheet, and will include the non-performing assets. A well-defined policy that establishes a loan loss reserve and periodically declares unrecoverable loans saves a program from declaring a large amount of unrecoverable loans all at once, thereby drastically reducing assets.
- Past due, unrecoverable loans that are still on the books negatively impact repayment rates, thereby negatively impacting the organization performance indicators. Such a practice reduces the repayment rates, resulting in an adverse presentation of the organizational performance. To avoid this, FIs should have clear allowances for loan losses. These allowances are reflected in Loan Loss Provisions and Loan Loss Reserves.

When Should Loans Be Written Off?

At all levels, if the loans are past their loan term and if the last installment is overdue more than a year (365 days past due), such loans should be written off. A write-off must only be done when the FI is 100% sure that the borrower will not repay. In case of death loans must be written-off, but if insurance coverage exists, then the outstanding loan amount can be adjusted from the insurance payout. It also makes sense to write-off loans when the economic cost associated with the recovery far exceeds the benefits.

Two important points that require mention here are:

- Any write-off is only an accounting entry and hence, write-offs should never be communicated to the staff who are in charge of managing the client accounts in field, and
 - In case of loans with longer loan terms, sometimes situations (natural calamities) may occur that require a write-off within the loan term. Under such circumstances, if the delinquency is due to a natural calamity, rather than write-off the loan, it may be better to reschedule the loan.
-

When are Loans Rescheduled and Refinanced?

Loan rescheduling or refinancing is a last resort, but may be an appropriate strategy under exceptional circumstances if the loan is not significantly overdue. Based on the above analysis and existing best practices norms, it seems appropriate to suggest the following:

Figure 5: Aging analysis of loans – recommendations for rescheduling, refinancing and write-offs

Classification of loan	Expectation of loss (key premise for managing delinquency)	Steps for delinquency management	What can be done with such loans	Comments
<p>Non-problematic</p> <p>Current loans with no overdues</p>	No portion of the loan amounts due (unpaid principal balance*) from all loans here are expected to be lost, as payments have been and are expected to be made as per schedule	Good social inter-mediation	Incentives in place to encourage maintenance of loans being current at all times	Client support and flexibility
<p>Becoming problematic</p> <p>≤ 30 days past due</p>	About 10% of the loan amounts due (unpaid principal balance) are expected to be lost but the remainder should be recovered.	<p>Activation of peer pressure to bring back borrower to current status.</p> <p>Loan recovery procedures in place</p>	Rescheduling/ Refinancing if there is a genuine problem (especially due to natural factors)	Nip delinquency in the bud
<p>Problematic</p> <p>31-60 days past due</p>	About 25% of the loan amounts due (unpaid principal balance) are expected to be lost but the remainder should be recovered.	Active and vigorous loan recovery	Rescheduling/ Re-financing if there is a genuine problem (especially due to natural factors)	Take rear guard action to prevent it from blowing up

Classification of loan	Expectation of loss (key premise for managing delinquency)	Steps for delinquency management	What can be done with such loans	Comments
<p>Problematic</p> <p>61-90 days past due</p> <p>Demands strong attention in terms of recovery</p>	<p>About 50% of the loan amounts due (unpaid principal balance) are expected to be lost but the remainder should be recovered.</p>	<p>Active and vigorous loan recovery</p>	<p>No Rescheduling</p> <p>No Refinancing</p>	<p>Fight existing delinquency to recover the maximum</p>
<p>Problematic</p> <p>91-180 days past due</p> <p>Demands very strong attention in terms of recovery</p>	<p>About 75% of the loan amounts due (unpaid principal balance) are expected to be lost but the remainder should be recovered.</p>	<p>Active and vigorous loan recovery</p>	<p>No Rescheduling</p> <p>No Refinancing</p>	<p>Fight existing delinquency to recover the maximum</p>

**The same can be done for interest payments as well. While FIs generally do not do this, it is strongly recommended because interest is the income with which FIs sustain themselves.*



3

Staff Incentive Schemes for FIs Engaged in WASH Lending

The objective of this chapter is to create a set of guidelines for designing staff incentive schemes (SIS) for FIs offering WASH financial services.¹ Staff incentives are designed to motivate staff to achieve high performance levels, change behaviors and/or change attitudes. Incentives are rewards for achieving certain targets or making a certain effort. This chapter will explore the following areas:

- » differences between WASH products and income generating products
- » reasons staff incentives are necessary
- » parameters to consider when designing staff incentives
- » designing staff incentive structures

¹ *Participants' Manual on Designing and Implementing Staff Incentive Schemes* by Martin Holtman and Mattias Gramming, Aug 2005

Differences Between WASH Products and Income Generating Products for the Purpose of Incentives

Detailed educational resources are already available for general microfinance on the topic of staff incentive. This section tries to specify the factors which FIs need to consider while designing staff incentives for WASH products.

There are inherent differences between a WASH loan and an income generating loan which implies a different set of rules for incentivizing staff for the two products:

- Selling a WASH loan product requires substantially higher communication and effort from the FI staff or potentially from the WASH supplier staff. In many cases, improving one's WASH situation is a latent household need and thus more effort and client awareness is needed to highlight the urgency of the need.
- For most FIs, WASH loan products are a small component of the total portfolio. In such a scenario, it is crucial that senior and middle management and field officers are properly incentivized for WASH products to retain their priority status.
- Offering WASH loan products involves extra operational steps such as site verification by a technician for feasibility of construction and cost estimate, utilization check by staff, different disbursement processes and more when compared to income generating loans. These activities will add to the workload of staff in serving WASH loan clients.
- Staff may have to manage multiple relationships with material suppliers, engineers/technicians, and contractors to support clients in proper loan utilization.
- Additional investment in the form of marketing and customer awareness may be required to prepare for a WASH loan offering.

FIs will want to differentiate incentives for income generating loans and WASH loans based on the strategic objectives of the organization. Thus, an FI intending to grow its WASH portfolio will want to offer higher incentives for selling WASH loan products compared to income generating loans. A more detailed comparison of a typical income generating loan and a typical sanitation loan product is provided in [Figure 6](#).

Figure 6: Comparison of an income generating loan product and a sanitation loan product

	Income Generating Loan Product	Sanitation Loan Product
Target clients:	New and existing clients	Existing clients
Loan size:	USD 80 – USD 400	USD 200 – USD 300
Methodology:	Group Guarantee	Individual loan with personal guarantor
Interest rate:	26% reducing balance	Monthly
Repayment:	Weekly or monthly	18.16% reducing balance
Tenure of loan:	1 year	2 years
Credit Plus:	Insurance, health camps	Sanitation awareness, training, health camps, toilet designs, mason trainings
Repayment collection:	Field officer of FI operations	Field officer of FI operations
Utilization check:	Informal	Stage-wise compulsory site visit by engineer and program officer
Client engagement:	Proof of existing business	Must invest in digging toilet pit

The Need for Incentives

Management should be interested in anything that might improve employee motivation, and a well-designed SIS can have a powerful effect on the performance and productivity of FI operations. Performance-based cash payouts are most frequently used, but non-monetary incentives are also possible. This is notwithstanding, the fact that FI operations are extremely “labor intensive”. Typically, an FI’s salary burden amounts to between 50% and 70% of its total operational cost. This means that more than half of the total administrative expense is accounted for by direct and indirect labor costs. Any decision to alter compensation levels or salary structure may have important consequences for financial performance, and deserves management’s involvement. The selection and training of new staff members is costly, making experienced FI employees a valuable resource.

The key objectives for having a strong SIS are:

- **Competing priorities for field staff:** FI staff usually have other products (like income generating loans etc.) to sell and without an appropriate incentive scheme they may not be motivated to focus on selling WASH finance products.
- **Compliance with loan process:** WASH loan products may require some unique processes which are not carried out in other loan products. For example, multiple visits to client location to check on the progress of construction or feasibility check to see the viability of the proposed WASH infrastructure. Incentives are needed to motivate the staff to ensure these processes are followed as per the standard policies.
- **Ensuring proper utilization of the loan:** FI staff have to put in additional effort to ensure the WASH loan products are being utilized for the stated purpose. This is required for WASH loans, although it may not always be required for income generating loans. Incentive schemes are needed to ensure staff put in the required effort to check on the proper utilization.

Factors to Consider While Designing the SIS for WASH Products²

It is important to ensure that the requirements set by the scheme are attainable and that better performers are rewarded with higher incentives. For the successful implementation and management of a WASH SIS, the following factors must be taken into consideration:

- The objective of the scheme must be in line with the overall purpose of offering the WASH loans and the interests of staff members must be aligned with those of management; for example the FI wants to give the loans to ensure clients have a WASH infrastructure built then there must be some indicator to measure whether the WASH loans are being utilized for the stated purpose.
- The focus of providing an incentive to all staff members involved in the credit delivery chain should be to increase productivity of staff and outreach (in terms of numbers of clients and portfolio growth), while maintaining quality.
- The scheme and measurement indicators should be simple to administer, easily verifiable and not overly complex.
- The scheme should enhance the existing spirit of teamwork, and supervisors' incentives should depend on the performance of the staff they manage.

2 Participants' Manual, Designing and Implementing Staff Incentive Schemes

The factors to consider when designing incentive schemes for a WASH portfolio are:

- Number of WASH loans
- Utilization rate by clients
- Satisfaction rate by clients
- WASH loan performance (PAR)

The rationale behind identifying such factors can be better understood by the following table:

Figure 7: List of factors for designing incentive schemes

Factors	Reason	Source of Information
Number of WASH loans	This has direct relationship with the incentive amount to be paid to the staff. WASH loans are consumptive and one- or two-times in nature and thus require continuous sales efforts to maintain the portfolio.	MIS of the FI
Utilization rate by the clients	This factor is the most important of all the listed factors as it denotes the usage of the loan for its allocated purpose. Achieving a high rate of utilization by the clients is aligned with the mission and vision of FIs.	Result of the loan utilization checks for every loan client
Satisfaction rate by clients	Satisfaction rates are tricky to measure and require standardized calculation method for objective and non-biased representation of staff performance.	Client feedback on the service quality (can be collected as a survey from among the clients)
WASH loan performance	Performance of the loan product measured through ratios like PAR and OTRR can identify whether loan performance is acceptable or not.	MIS of the FI

Overall the SIS can be represented as:

Incentive amount = Function

(Number of WASH loans, utilization rates by the clients, satisfaction rate by clients, WASH loan performance). Each FI can use a combination of any of these four factors for designing incentive schemes for the staff.

Assigning Weights to Incentive Scheme Factors

Assigning weights to the incentive scheme factors is a qualitative procedure which must be undertaken by the senior management along with the branch managers. This process requires an intensive brainstorming session in which considerable amount of time will be spent. This step is important for those who are involved in measuring staff achievement in relation to the incentive scheme.

Figure 8: Example of assigning weights to incentive scheme factors

Factors	Weight assigned
Number of clients converted for WASH loans	25%
Utilization rate by the clients	25%
Satisfaction rate of the clients	25%
WASH Loan performance rates (PAR)	25%

Steps in Designing an Incentive Scheme

The general principles for designing staff incentives for FIs include:

Step 1: Define the Incentive Scheme’s Objectives

Defining the incentive scheme’s objectives is fundamental to the process and requires the participation of management, and potentially the board of directors. It is important to be clear about what the organization is trying to achieve with the scheme. Moreover, the objectives of the incentive scheme must be in line with the strategic goals of the financial institution. This is an important step from a WASH product point of view since this directly relates to the purpose and use of such loans.

Step 2: Determine Staff Members to Target

Identify those staff members who will contribute most to the achievement of the incentive scheme’s objectives. Along with their performance, the FI should identify those staff that should undergo some additional WASH program training. The targeted staff should clearly understand the need for such products in order to effectively communicate with other stakeholders.

Steps in Designing an Incentive Scheme:

1. Define Objectives
2. Determine Staff to Target
3. Select Incentive Mechanisms
4. Conduct Technical Design Work
5. Analyze Costs/Benefits
6. Run a Pilot Test
7. Sell the Scheme to Staff
8. Monitor and Adjust

Step 3: Select the Incentive Mechanisms

Incentive schemes may include merit pay, incentive pay, perks, benefits, profit sharing, gain-sharing, ownership or any combination of these. Schemes can also be short-term or long-term, or include tournaments and individual or group-based incentives.

Step 4: Conduct the Technical Design Work

This includes formula development and calibration, as well as spreadsheet testing. It is useful and highly recommended to carry out sensitivity and scenario analyses. It helps to use a participatory process in designing the scheme.

Step 5: Analyze the Costs and Benefits

It is important to conduct a cost-benefit analysis and to estimate the impact that the planned scheme will have on operating costs and the organization's financial performance. In the short-term, a bonus scheme will increase total staff costs; however, if the system is well-designed, these costs will later be compensated by increased staff productivity and output.

Step 6: Run a Pilot Test

Field testing the scheme in a controlled environment is very important. With all the financial models, scenarios and estimates, the best test for a scheme is how it will be received in the field.

Step 7: Sell the Scheme to Staff

The importance of how the incentive scheme is communicated to staff is frequently underestimated. Make sure that staff members understand the incentive scheme's mechanics and the reasons for the scheme. If staff do not accept the scheme, it will have no effect on performance, and could even be counterproductive.

Step 8: Monitor and Adjust the Scheme as Necessary

SIS should be regularly monitored and reviewed by senior management to ensure continued success of the program. Are the objectives of the organization still the same? Does the scheme in place still achieve the intended purpose(s)? Depending on the answers to such questions, it may be appropriate to make changes and adjustments.

Designing Staff Incentives for WASH Financial Products

There are two ways of designing a SIS for FI staff involved in the WASH portfolio.

Staged Process

A significant percentage of incentive schemes encountered in practice are built around stages. One way to think of a staged scheme is to imagine it as a staircase. For example, loan officers of an FI can receive \$20 if they disburse 21-40 loans and \$40 if they disburse more than 40 loans within a month.

Linear Process

Linear schemes are based on a simple formula:

$$\text{Bonus} = a * b$$

a = is the output measure (e.g. the number of disbursed loans)

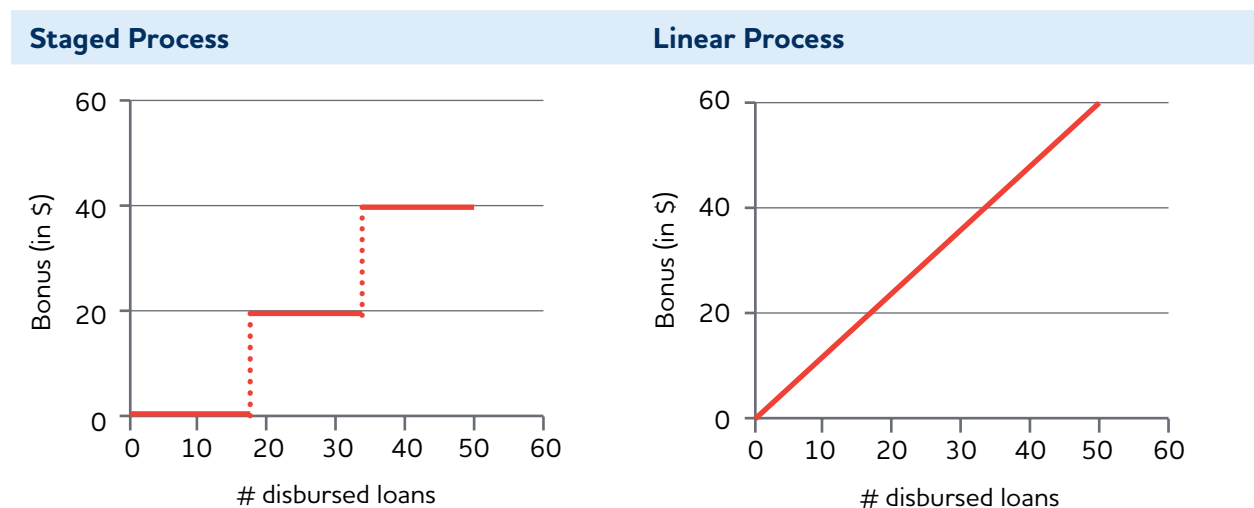
b = is a monetary value (e.g. \$1)

Example:

A loan officer who disbursed 20 loans would receive a bonus of $20 * \$1 = \20 .

While designing the SIS for WASH financial products, the WASH FI needs to focus primarily on number of clients, proper utilization, and client satisfaction along with maintaining portfolio quality. Hence, the SIS for WASH products can be designed by using the linear process.

Figure 9: Types of staff incentive schemes



Example of a Linear SIS for a Loan Officer offering WASH³

Suppose an FI uses the following factors – number of WASH loans disbursed, utilization rate by clients, client satisfaction and PAR – as the parameters to measure incentive for the loan officer. The FI has assigned equal weights to each of the parameters as shown in the table.

Figure 10: Sample weight assignments by FI for linear SIS calculation

Factors	Weight assigned
% Achievement in target of number of WASH loans	25%
Utilization rate by the clients	25%
Satisfaction rate of the clients	25%
WASH Loan performance rates (PAR)	25%

Then the incentive calculation formula in this case will be:

$$\text{Total Incentive Amount (in USD)} = (A * B)$$

A = Percent achievement in target of number of WASH loans disbursed * (assigned weight) + Utilization rate by the clients * (assigned weight) + Satisfaction rate of clients * (assigned weight) + PAR * (assigned weight)

B = Maximum amount of monthly incentive available for loan officer (The maximum amount can be calculated as a percentage of the Base salary of the officer, ex. 30%)

FIs can also offer non-financial rewards into their incentive systems. These are useful when the FI feels that the financial compensation given is high enough to not give additional financial rewards or the FI cannot afford the costs for offering additional incentives. Though giving non-financial incentives alone may not be sufficient to motivate field staff, some FIs have found that non-financial incentives can complement actual financial rewards.

3 For more examples of incentive calculation formulas please refer to MicroSave’s Toolkit: *Staff Incentive Schemes*.

SMEP, a Kenya-based FI which offers WASH credit products to its clients developed a very unconventional staff incentive structure to support their WASH credit products. Under this plan, regular incentives were offered to field and branch staff on monthly and quarterly basis. The incentive plan was structured as a contest to evoke positive staff outlook towards the scheme.

Figure 11: SMEP incentive plan showing eligibility criteria with financial and non-financial incentives

Criteria	Eligible	Non-Financial and Financial Incentive
For most WASH loan accounts acquired	Credit officers	Certificate of recognition issued by CEO A WASH polo T-shirt and a cap
For best photograph of a WASH borrower	Credit officers	A WASH polo T-shirt
For developing best WASH client profile and journal	Credit officers	A WASH polo T-shirt
Quarterly scheme		
For most WASH loan accounts acquired	Branch	A written recommendation and certificate signed by CEO Cash incentive: <ul style="list-style-type: none"> • Best Officer to get KS. 5,000 • 1st Runners up to get KS. 3,000 • 2nd Runners up to get KS. 1,000
For most WASH client profiles, WASH post-disbursement interviews and journals	Branch	A trophy for the overall best performing branch Overall best performing branch certificate signed by the CEO A lunch/dinner of an amount as approved by the CEO

FIs should conduct a cost-benefit analysis of all the incentive schemes developed to review whether the benefits received after the implementation of the scheme outweigh the costs of the scheme. The staff incentives are an important motivation tool which should be designed with utmost care and pilot tested before implementation across all the branches to ensure that only the required positive behavior among the staff is being encouraged.

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*On the cover:
A boy drinks safe water
in Tigray, Ethiopia.*



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