2/3/2019

Monitoring and Results Measurement Manual for Shomoshti project

Version 2.0

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Introduction

Care Bangladesh is implementing a SDC funded project named Shomoshti- Prosperity for the Poor and Disadvantaged. Shomoshti is manadated to ensure business/ technical services to agriculture, agribusiness and home/ cottage based activities and create access to social services and savings systems for 200,000 rural households of Bangladesh, particularly the poor and disadvantaged by ensuring higher incomes, better nutrition and more education. Shomoshti will directly contribute to the priorities and objectives of Swiss Development Cooperation (SDC) in Bangladesh as stated in the Swiss Cooperation Strategy Bangladesh 2013-2107. Shomoshti will also contribute to the Sustainable Development Goals (SDGs) and the 7th Five Year Plan of Government of Bangladesh (GoB) by addressing issues related poverty, food security, nutrition, water and sanitation, inclusive economic growth, women empowerment, climate change and inclusive and responsive institutions. The Shomoshti project will address market constraints which affect the participation of the poor and disadvantaged through dialogue with local government institutions and policy-setting government agencies at regional/ national level as appropriate. Two distinct pillars of services and systems will guide the interventions in achieving three outcomes respectively at community, market and enabling governance spheres in realizing the envisioned impact.

Being a Market and Social services development project, Shomoshti has decided to follow the DCED (Donor Committee for Enterprise Development) Standards for Results Measurement for its Monitoring and Results Measurement (MRM) system. So, the whole MRM framework has been developed based on the DCED standard and different compliance criteria suggested by the DCED standard worked as the building blocks of the MRM framework for Shomoshti. This MRM manual is prepared in such a manner that it works as the single reference point for all the monitoring and results measurement related activities of Shomoshti and that's the reason the manual is designed on the practical uses of the different MRM tools and the theory parts are associated with the practical uses of them. So, this manual only discusses about those parts of the theoretical issues which are expected to be useful for Shomoshti MRM works.

Based on the suggestion of the DCED standard, the whole MRM system of Shomoshti is designed focusing on the use of the results chains of the individual interventions. Based on the results chains, the Intervention Guides (IG) are being prepared and then the results from the individual IGs are being aggregated by the Shomoshti Results Aggregation System (SRAS). These SRAS and the IGs are two key documents for Shomoshti MRM system. The all other tools basically work as supportive ones for these two basic documents.

Shomoshti MRM system is designed based on the very latest version of DCED standard which was released in April 2017. DCED Standard version VIII caters all the recent demands of the development community and more responsive to current the practical issues, practices and updates.

Role of the teams in MRM activities

It would be better to keep in mind that following the suggestion of the DCED standard, the MRM system in Shomoshti is a system which is realized by all the implementation and MRM team members of the project. It's a shared responsibility and the MRM team only has some specific additional skills to help the whole team in better performing their work. The specific responsibilities of specific tasks are mentioned in the manual like who will be responsible or who will take the lead and when etc. but all the Shomoshti team members should keep in mind that Shomoshti believes in an 'Institutionalized MRM system' and here both the monitoring and results measurement tasks are being performed as a team (the summary roles and responsibilities on results measurement are summarized in *Annex 6*).

At the same time, the MRM team should also keep in mind that their role is a supporting function for Shomoshti, for the improvement of the implementation works and help Shomoshti in harvesting the results and claiming in a proven way. In Shomoshti, the MRM system has two clear roles, Prove and Improve.

Shomoshti Monitoring and Results Measurement System
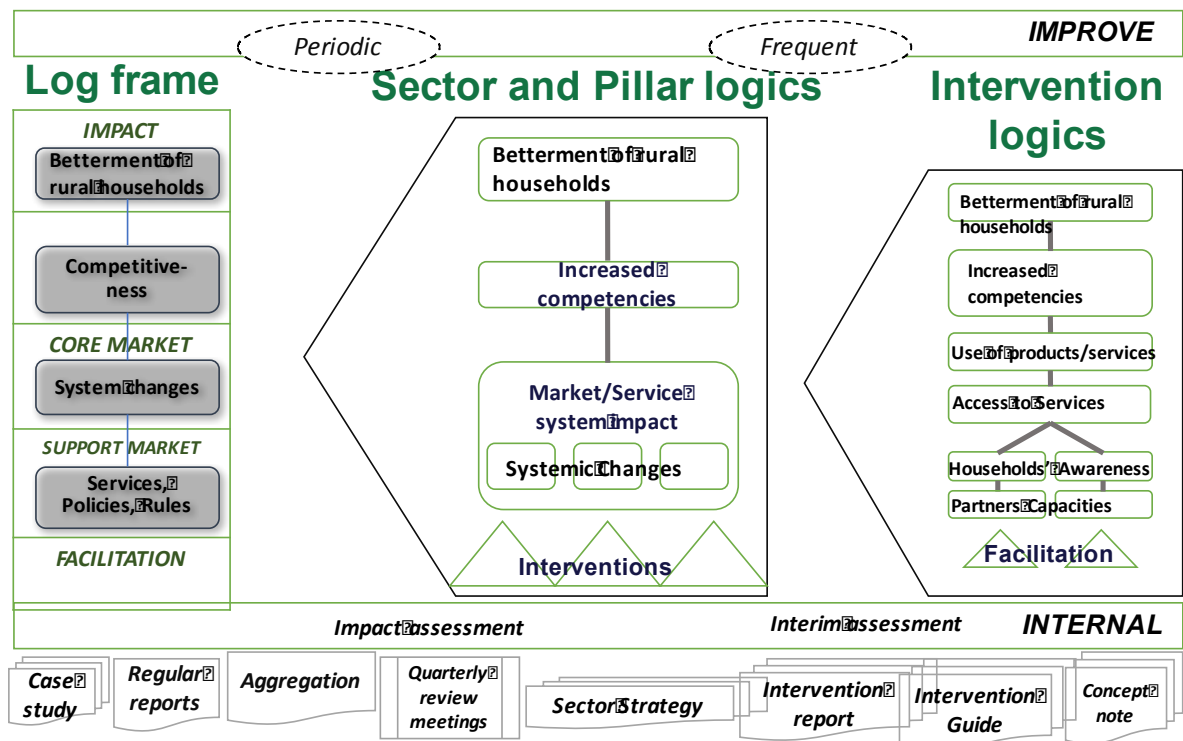
*Adapted from Katalyst MRM system

Improve

'Improve' is basically the role of the Monitoring part of the MRM system and this role is played by both the implementation team and the MRM team. Shomoshti believes in continuous improvement through learning. All the information on the progress of the interventions will be used for the betterment of the interventions. This information can

come through any source- monitoring visit of the implementation or MRM team, reports from the field team or updates from the partner etc. One of the most useful tool for monitoring and 'Improving' part is the 'Quarterly Review Meeting' which is discussed in detail in later part of the manual.

Prove

The prove part is basically the role of the results measurement part. This is to prove to the wider audience including the donor, government and all others that the achievements that Shomoshti is claiming are the result of a reliable and credible system so that they can have trust on those. The MRM team takes the lead in the prove part by maintaining the aggregation system, designing studies etc. The details of Attribution methods, Aggregation system and Designing studies will be discussed in detail in the later parts of the manual.

Annex 5 presents a detailed table on the MRM related roles and responsibilities of different staff in Shomoshti.

The whole MRM system in Shomoshti is based on the Donor Committee for Enterprise Development (DCED) standard version VIII. So, here is a brief introduction to the standard and then we will see how the standard is incorporated in the MRM system of Shomoshti and how the whole system is based on the recommendation of the standard.

DCED Standard

The DCED standard is based on 7 elements
1. Articulating the results chain
2. Defining indicators of change, other information needs
3. Measuring attributable change
4. Capturing wider changes in the system or market
5. Tracking costs and impact
6. Reporting costs and results
7. Managing the system for results measurement

Under these elements there are 31 control points and under these control points, there are 69 compliance criteria. These control points and compliance criteria are basically the detail outline of the 7 elements. It works for any project in the following way
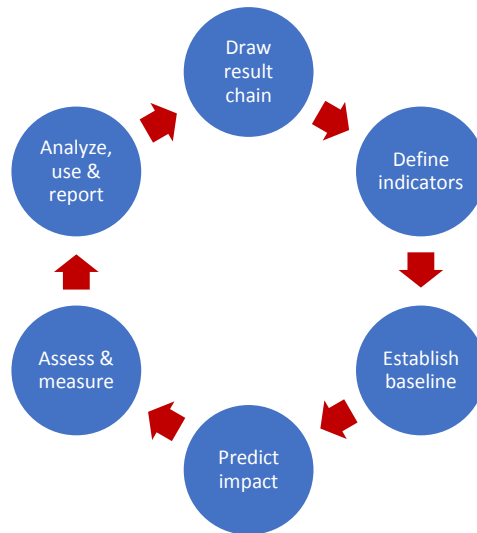
Here is a brief on the elements just to have an idea about those

1. Articulating the Results Chain
- Illustrate what we are doing, and why we are doing it.
- Clarify the expected outcomes and impact of your program.
- Identify key assumptions underlying the program.
- Communicate the program to partners and external stakeholder

2. Defining Indicators of Change, Other Information Needs
- Indicators specify how we will measure whether the changes anticipated in the results chains are occurring.
- Indicators should be derived from the logic of the results chain.

3. Measuring Attributable Change
- Develop a system for measuring how they change.
  - A 'results measurement plan' is required to summarize what indicators will be measured, when, how, and by who.
  - Research will frequently be required to gather information against indicators, which should conform to established good practice.
- Monitoring key indicators at appropriate intervals provides valuable feedback for program staff, assisting them to manage and adjust the intervention.

impact

Attribution change

Counter factual

Total change
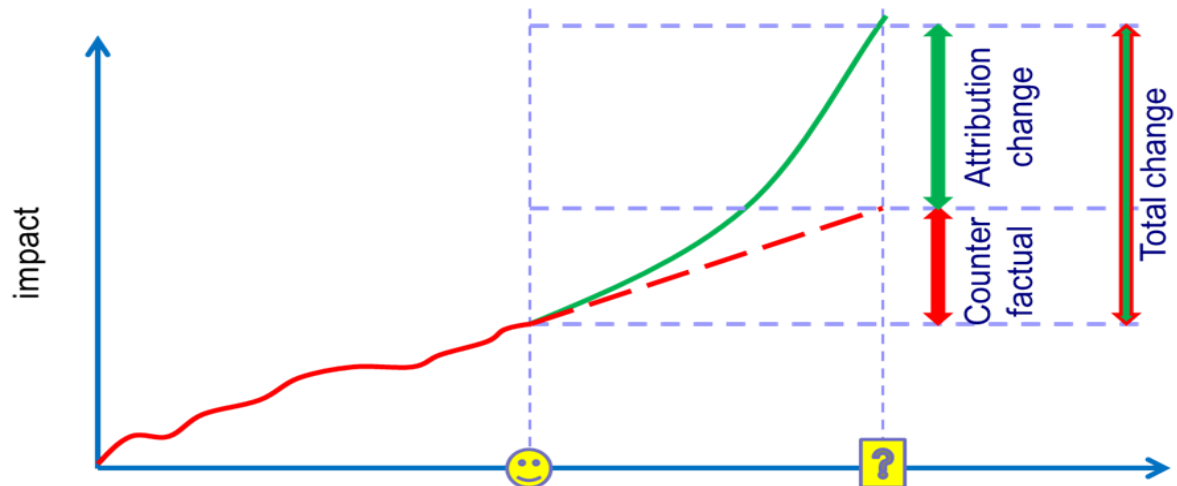
4. Capturing Wider Changes in the System or Market
- Sustainability
  - The change continues even after program support is withdrawn
- Growth
  - New areas
  - New partners
  - New actors
- Regulatory changes

5. Tracking Costs and Impact
- Annual and cumulative costs – so that achievements of the program can be put into perspective.
- Tracking the impacts for the overall program

6. Reporting Costs and Results
- Document the key changes in the indicators at least annually
- Communicate:
  - Internally to donors, management staff, program staff, Gov.
  - Externally if deemed appropriate.
- Acknowledge the contributions made by other projects or the private sector.

7. Managing the System for Results Measurement
- Use real-time monitoring data to adjust approach/activities
- Achievement of results should drive the program:
  - Use for design
  - Use for implementation
  - Orienting staff efforts
  - Guiding key decisions.

Intervention Guide (IG)

The intervention guides or IGs work as the single document for any intervention in Shomoshti. All the documents relevant for any intervention are kept at one place so that all the relevant documents can be updated any time when there is a need for update for any intervention. We should also keep in mind that we are following a special form of market development approach and in market development approach, as we are dealing with real life market and service providers, the scenarios and realities can be changed any time. So, our intervention strategies can be needed to be changed to cope up with the recent changes in the markets. If we keep all the linked documents at the same place, then it's easier to have the updates and that will be applied to all the connected documents for the intervention.

Like the whole MRM system of Shomoshti, the IG also based on the results chain. The results chain in Shomoshti is not taken just as the tool but it is used as the story telling tools for the single interventions. It ensures that all the staff in Shomoshti know what they are doing and why they are doing. With the results chain, there are some sheets in the IG to address all the details of the interventions.

Cover Page

The Cover Page covers the basic information of the interventions like the Intervention tile, Intervention code etc. The Intervention Manager refers to the name of the person who is responsible from the implementation team to manage the intervention. Then the name of the person who is the MRM focal for the specific intervention from the MRM team. Unit lead is the person from the implementation team who is the supervisor of the intervention manager and responsible for reviewing the documents. Relevant market is the sector or market or services sector under which the intervention falls. The Relevant pillar is the wider working area of Shomoshti, either the Market pillar or Social services pillar. Then comes the intervention starting and expected closing date.

Following are the specific concerns which require special attention while designing the interventions. These sections ensure that Shomoshti has thought through all these concerns while the interventions are planned. The first section is the Women Empowerment issues. This section has the details of the relevance of the intervention with the women empowerment issues. How women are involved with the intervention, how they will be impacted from the intervention and what specific things the intervention will perform for the betterment of women empowerment etc. will be detailed out in this section.

Green Growth section covers the issues regarding how the intervention might have any impact on environment/climate change factors or how the environment/climate change issues might have any impact on the implementation or results of the intervention. This can be a direct impact of the intervention on the environment or how the intervention is working on reducing the vulnerability of the target people etc. This section also

discusses on the probable climate change issues about which Shomoshti should be aware of and prepared so that they can mitigate the risks of being impacted.

Displacement discusses about issues how different groups can be affected by the intervention as an unintentional impact. This can happen both at the service providers level or at the beneficiary level. Some non-targeted service providers might get positively or negatively affected by the intervention due to the change in the market system or the service sector. For example, the quacks at the rural areas might lose their business due to the promotion of quality health care system or some market players might lose their business due to the promotion of the new products or services supported by Shomoshti. At beneficiary level, some rural people also might get positively or negatively affected by the benefits of the Shomoshti beneficiaries like some farmers may face difficulties in finding buyers of their crops if Shomoshti can introduce better-quality ones for their beneficiaries through the service providers. But in that case, those affected ones should also start copying that practice and that might be part of bringing wider systemic changes. For most of the cases, Shomoshti might not have anything to do for this unintentionally affected groups but what is important that is, Shomoshti is concerned about this positive or negative impacts at different levels and reporting about those unintentional impacts in this section. Which is most important that is, even if any intervention is not expecting any displacement, the team must document the reason why they are not expecting any displacement.

Cover Page			
Intervention Title:			
Intervention Code:			
Intervention manager:			
MRM Focal:			
Unit Lead:			
Relevant Market:			
Relevant Pillar:			
Intervention Timeframe	**Starting date**		**Expected closing date**
Women Empowerment issues			
Green Growth issues			
Displacement issues			
Intervention log			
Date	**Summary of the changes made**	**Reasons for Changes**	**Changed by**

The next section is for keeping the log for the changes. As Shomoshti expects that the interventions will have changes and updates, the relevant areas in the IGs will also have the need to be changed. But there is a need to track the changes and this section play that role. This section in the IG records what are the changes those took place, reasons for changes, when the changes were made and who were made these changes. This is very important because this is also the evidence that the intervention and the IGs are reviewed periodically which is a very important compliance criteria for the DCED standard.

Intervention Story

The purpose of the intervention story sheet is capture the background and justification of the intervention. The sheet starts with the Market symptoms/Key constraint section which states about the visible market symptoms for which the necessity of the intervention was felt. Market symptoms are generally identified through an in-depth sector research. Market symptoms are the result of the key constraints for any specific market. Market constraints can be issues like the farmers are not getting proper price for their product or the rural households are visiting the quacks for the health related services.

The next section is for the Root causes which are the main reasons for the key constraints. Shomoshti team finds out the root causes through an investigative approach. All the 'Why' questions are being asked against the market symptoms and followed by the follow up questions until the actual root causes are identified. For example, say if the poor farmers not getting proper price for their products be the market symptoms, the follow up 'why' question is why they are not getting proper price. If the answer is due to poor quality of their products, then the follow up 'why' question would why the quality is poor. If the answer is they don't know about the good quality seeds and the right cultivation practices, the follow up 'why' question would be why they don't know about those issues. If the answer is no one is there to inform them on those issues, the follow up 'why' question would be why no one is providing them that information and based on the answer, the intervention would try to find out the solutions to solve the issues. Right solution can only be provided if the problems are being rightly addressed.

The following section discusses about the solution which has been planned to be implemented as the solution of the root causes, in other words which is basically the intervention. This section provides the details of how the intervention will work on addressing the root causes. The proposed intervention is being described here in this section.

The Partner analysis and selection process discusses about who the partners of Shomoshti for the intervention are and how they were selected. This section should focus on the capability, market share and willingness of the partners to become suitable for implementing the intervention. All the details for selecting the partners should be included here.

Intervention story
Market Symptoms/ Key constraints
Root causes
Solution provided
Partners analysis and selction process
Targeted Systemic Change and ways to achieve that
Incentive Model

Systemic changes are the wider goals for which we implement any market and social development projects like Shomoshti. Shomoshti first defines some intervention areas to reach the targets in the log frame through detail sectoral studies and then the team designs specific interventions under those intervention areas. Details on 'Systemic change' will be discussed in a later part of this manual but this section discusses about the systemic change areas what the intervention results are contributing to and the pathway of how the wider target is planned to be achieved. For example, the intervention which Shomoshti is implementing, how that will attract the other market players other than the intervention partner/s and how that will become a market norm for that specific market or sub market or service sector area.

Incentive model is the simple visual representation of the intervention showing all the actors, their roles and incentives. It's basically a simpler form of the business model which focuses on displaying all the related actors in any business model, their specific roles in the business model and their clear incentives from being part of this model. M4P interventions are all about creating Win-Win business models which creates incentives

for the market actors and at the same time for the targeted poor people. The incentive model shows 'who does what' and 'what they are getting in return'.

Attribution Analysis

Attribution analysis starts with the table form of the incentive model where the details are documented like all the actors, their detailed roles and responsibilities as part of the intervention and exactly what are their incentives from the new model that the intervention is trying to promote. In the Incentive model, there was a visual presentation of all these issues but here the details are being documented. This is to ensure Shomoshti is not missing to ensure proper incentive for all the actors related to any intervention model and the role are also properly defined. Because if all the actors don't have their appropriate incentive, they will not continue with the intervention model after the intervention and intervention will be failed in longer term.

The following section is for documenting the plan for baseline. The plan includes the planned time for conduction of the baseline, target group selection process, sample composition for the baseline, form of establishing baseline (at the beginning of the intervention or Retrospective process) etc. all details. Here are some tips for planning the baselines

- There is a difference between sector analysis and baseline information. Sector analysis is done before coming up with sector strategies and interventions, it provides the justification for intervention. Sometimes sector analysis generates baseline data like costs, yields, etc. It is important to check whether such data is indeed for target beneficiaries for intervention before using the data for intervention specific baseline.
- Collect baseline data when you know what the intervention is about so that it is intervention specific.
- It is okay to use recall data for baseline, when you cannot access information before intervention. However, it is useful to explain in such cases why baseline can be done retroactively.

Source: Advance workshop (DCED, 2012)

Attribution Analysis

Key actors, Roles and Incentives

Actors	Roles	Incentives

Plan for baseline (Time, Target group selection process, Sample size)

Attribution methods

Beneficiery level	
Service providers level	
Partner level	

Risks

Risks	Impact	Mitigation plan

The different attribution methods have been discussed in detail in a later part of this manual. But the next section is for documenting the planned attribution strategies for different stakeholders of the intervention. Here it should be noted that for different stakeholders of any intervention, appropriate attribution method can be different.
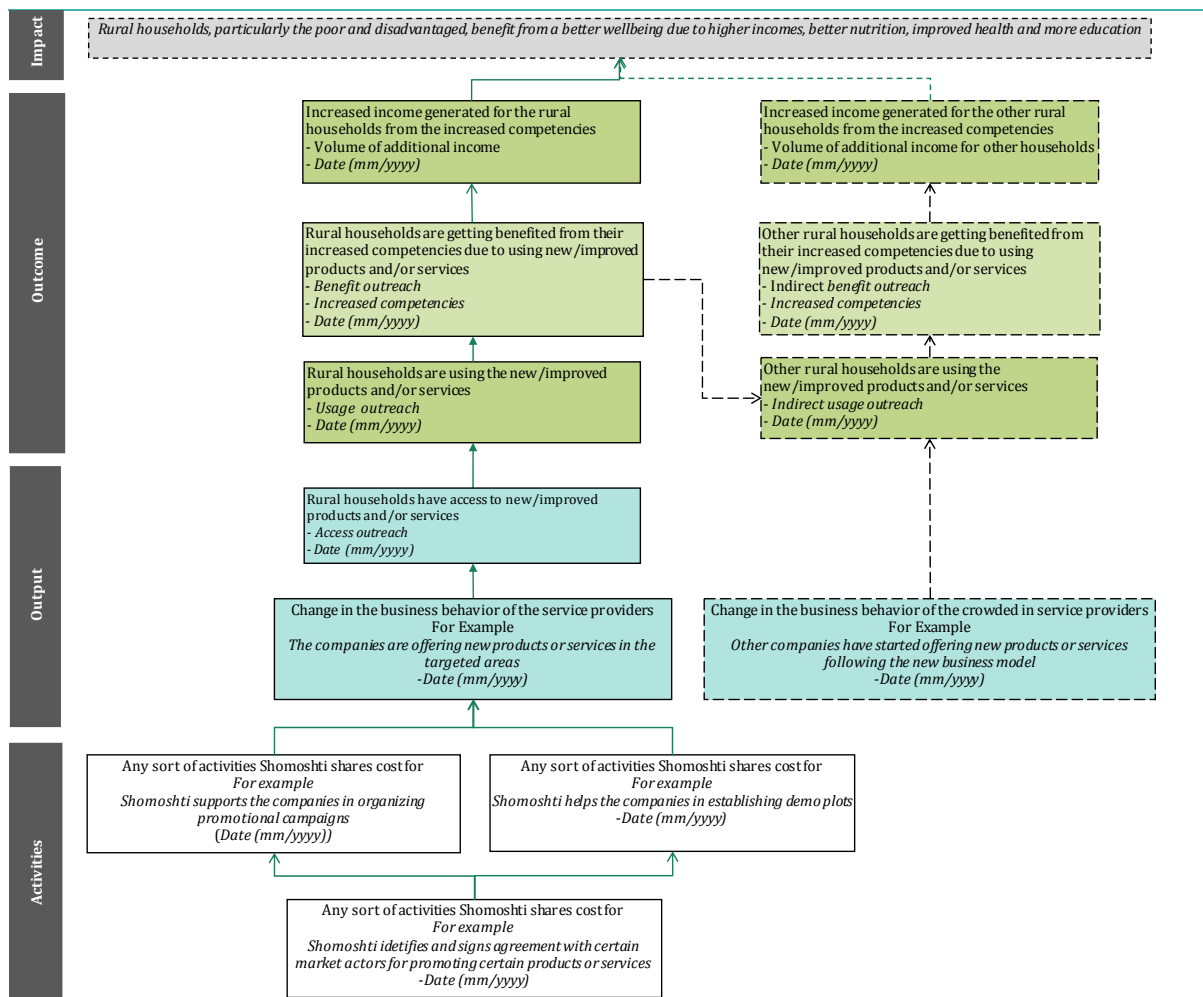
The next section is for capturing all the internal and external risk factors related to the intervention which might affect the successful implementation of the intervention. If the

team can identify the probable risks, know about their impact and have a mitigation plan from the very beginning, that ensures that the team know their intervention very well and as they have figured out the probable risks, that means they are better prepared to face those risks. So, this is a very important section and the teams must address all the external factors like weather issues, political situation, policy level changes, international trade etc.

Results Chain

Results chains are the most important part of Shomoshti MRM system and DCED standard strongly suggests to make results chain the base of all the monitoring and results measurement works of any market development project. Results chains are used as the Story Telling tool for the intervention as it shows how different activities of the intervention leads to the overall target of Shomoshti. The results chains are named upon their nature that these are chains of results which shows the flow of the logics that how the Activities are changing the behavior of the service providers at the Output level which is leading to the betterment of competencies of the targeted group at Outcome level and how that is contributing to the Impact level indicators of Shomoshti. Shomoshti believes that if any team can articulate the results chains properly, that means that they know their intervention very well and they know what they are doing and why they are doing so.

Shomoshti results chains, both the versions for the market interventions and the social interventions have four levels, namely Activity level, Output level, Outcome level and Impact level. The Activity level states all the major activities performed by Shomoshti and the market and social service partners. It generally starts with having an understanding with the partner of identifying the partner or conducting a study to identify the partners and followed by the activities performed by the partners or Shomoshti to realize the intervention. The activities can be like organizing an awareness events for the target groups, establishing demo plots, arranging trainings for the target groups, capacity building of the end service or product delivery staff etc. All the activities at this level will have a direct contribution in changing the

Impact

Rural households, particularly the poor and disadvantaged, benefit from a better wellbeing due to higher incomes, better nutrition, improved health and more education

Outcome

Increased income generated for the rural households from the increased competencies
- Volume of additional income
- Date (mm/yyyy)

Increased income generated for the other rural households from the increased competencies
- Volume of additional income for other households
- Date (mm/yyyy)

Rural households are getting benefited from their increased competencies due to using new /improved products and/or services
- Benefit outreach
- Increased competencies
- Date (mm/yyyy)

Other rural households are getting benefited from their increased competencies due to using new /improved products and/or services
- Indirect benefit outreach
- Increased competencies
- Date (mm/yyyy)

Rural households are using the new /improved products and/or services
- Usage outreach
- Date (mm/yyyy)

Other rural households are using the new /improved products and/or services
- Indirect usage outreach
- Date (mm/yyyy)

Output

Rural households have access to new/improved products and/or services
- Access outreach
- Date (mm/yyyy)

Change in the business behavior of the service providers
For Example
The companies are offering new products or services in the targeted areas
-Date (mm/yyyy)

Change in the business behavior of the crowded in service providers
For Example
Other companies have started offering new products or services following the new business model
-Date (mm/yyyy)

Activities

Any sort of activities Shomoshti shares cost for
For example
Shomoshti supports the companies in organizing promotional campaigns
(Date (mm/yyyy))

Any sort of activities Shomoshti shares cost for
For example
Shomoshti helps the companies in establishing demo plots
-Date (mm/yyyy)

Any sort of activities Shomoshti shares cost for
For example
Shomoshti idetifies and signs agreement with certain market actors for promoting certain products or services
-Date (mm/yyyy)

behavior of the service providers. Here it's noteworthy that there can be two types of service providers- the big ones, usually the partners and the smaller ones who are generally responsible for delivering the end products or services to the targeted groups. The 2nd type of service providers work at the delivery end and usually they are the distributors or retailers of the big service providers, say partners of Shomoshti. But it should be also kept in mind that this is just the usual forms of service providers, not the only one. Shomoshti can partner with many small-scale service providers directly and they might delivery the products or services directly by themselves. For the social service interventions, Shomoshti might work with government actors for ensuring quality service delivery and there can be many innovative form or partnership and service/product delivery as well. For ensuring the end delivery of products and services Shomoshti will work with two newer form of service providers- LSPs for the market interventions and SCAs for the social interventions. LSPs or Local Service Providers are the new or existing service providers in the locality of the beneficiaries who will be linked with the large service providers and LSPs will be responsible for providing the products or services at the doorsteps of the targeted community. They are entrepreneurs and they will make business out of that. On the other hand, SCAs or Social Change Agents are those specific people in the communities who want to serve the communities and through that, want to create a position for themselves in the community. They will be

responsible to disseminate the messages to the communities and conduct different activities with the community for their greater good. Shomoshti will also link them with different organizations and public/private bodies who offer social services. But the output level boxes depict all the changes in behavior of the service providers due to the intervention activities and how the changes in their behavior are reflected in their offering better products and services to the targeted groups. So, the top-level boxes of the output level show how the changes in the behavior of the service providers are translated in the ground as creating access to the new/modified products of services to the targeted groups. Access for the products and services are mentioned at this level.

The level 'Outcome' is basically to show the change in the competencies for the rural households. That can be in the form of better market price from better output market, better market price due to higher quality output, additional cost saving, higher yield, better health
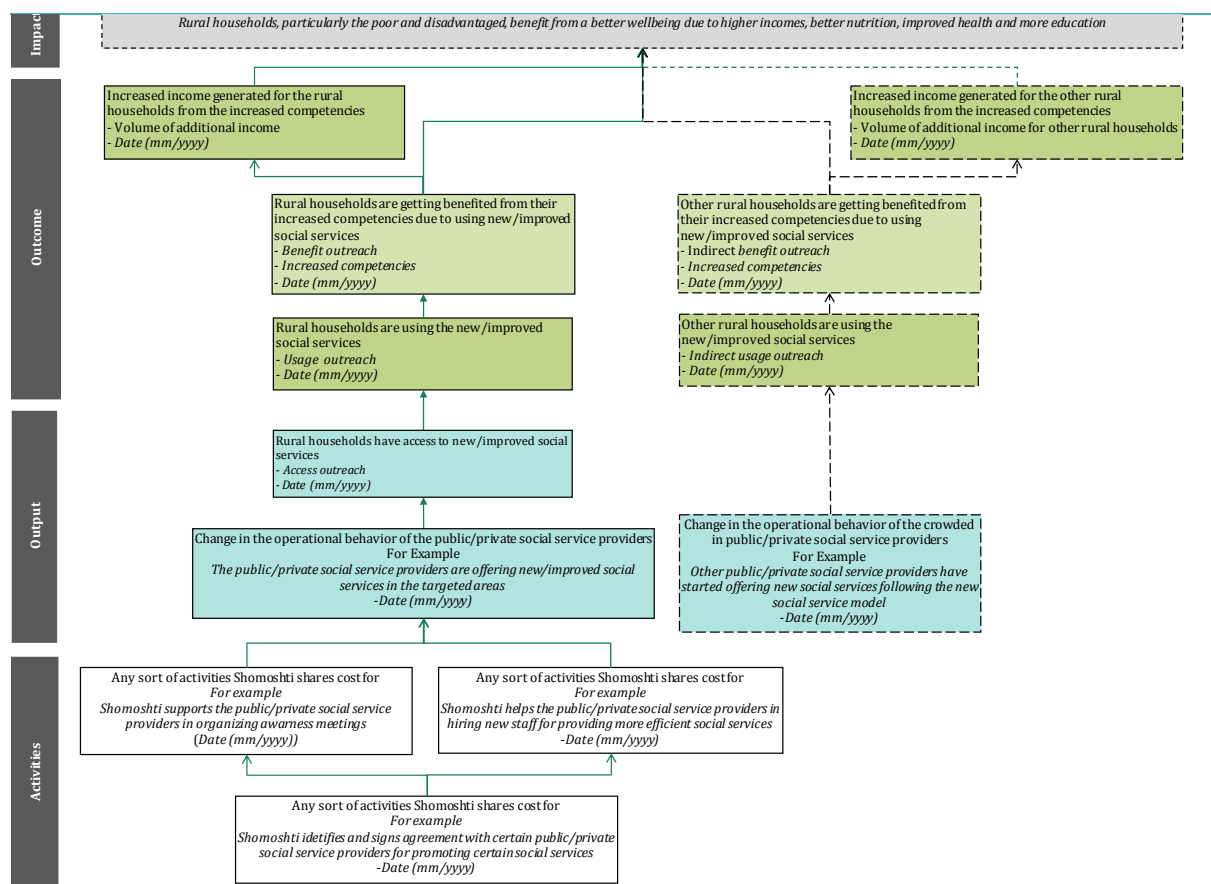
services, better education, increased savings etc. The boxes at this level describes that the target groups are using the products and services and they are getting benefited from that. Usage and benefit outreach is part of this level. Results from this level directly contributes to the impact level targets of Shomoshti. And Impact level is for capturing the changes made for the impact level indicators of Shomoshti.

Basic rules for designing results chain

There are some basic rules for designing results chain which helps in designing meaningful and communicative results chain

- The results chain should be always from Activity to Impact level
- There is no limit for boxes at any level. There can be as many boxes per level based on the necessity. But it should be kept in mind that there should not be any redundant boxes or boxes which if merged with other boxes, make more sense. So, there can be many boxes but each box should be meaningful and value adding.
- The incentive/business model should be 'at the core' of the results chain.
- Arrows should be always from bottom to top with a few exceptions.
- The teams should be concrete in change description: who does what? who changes how?
- The teams should keep in mind that it is a causal model:
    - Not chronological, which means it's based on the flow of impact, not just the chronology of the events
    - Not a value chain, which means results chains are not meant to just mirror the whole value chain, just the specific areas of the value chains where the changes are taking place

The teams working on any results chain should also keep in mind that sustainability is the key concern for Shomoshti for working on any intervention is sustainability. So, how the intervention is going to be sustainable should be an integral part of the intervention and obviously of the results chain. Although Shomoshti uses the systemic change tracker to track systemic change but the anticipated systemic changes are also part of the results chain so that Shomoshti always keep those issues in mind and doesn't forget to assess the copying in and crowding in changes of any intervention. Copying in happens at the Outcome level when the non-targeted groups start copying the practice of the targeted group after seeing their benefit from it. Crowding in takes place at the outcome level when the competitors or other actors start copying the changed business model or the changed practice of the partners or the associated service providers of the intervention. Details on the systemic change is described in a later part of this manual.

The roles of results chain are following
- ✓ Clearly outline chain of expected changes from program actions through various levels of change to impact level.
- ✓ Provide the basis for assessing if and to what extent changes are taking place.
- ✓ Provide the basis for assessing if new ways of working will last.
- ✓ Provide the basis for assessing to what extent changes are due to program activities.

Shomoshti suggests to follow the following steps for designing results chains
- ➡ Define the systemic changes (strategy) the project wants to bring about.
- ➡ Develop an incentive/Business Model around this and clarify the actors in the model.

- Write down the main activities (in logical order).
- Describe the changes at service market/ intermediaries/ enabling environment/ system level (changes in capacity followed by changes in behaviour and in increased interaction.
- Describe expected behavioural changes at enterprise level.
- Show improved performance e.g. productivity, profit, life standard.
- Show improvement on income, jobs or other impact level indicators.

But for the use of results chain, the following facts should be kept in mind
- Impact logic is a map, not a picture.
  - The results chains should be clear and concise.
- Developing results chain is not just an individual activity. Results chains should always be developed by the whole team including the related implementation and MRM team members.
- Number of boxes is not an indicator for level of work. This is an art of telling the story in an interesting way when you are not missing any important point and at the same time you are not making the story lengthy.
- An impact logic is not only a management tool, but should also tell a story.

And finally, here are some easy tips for developing effective results chain*

Produce a coherent causal model
1. Explain how the intervention contributes to the results
2. Avoid dead ends

Be logical
3. Make every arrow meaningful
4. Indicate the direction of Expected change
5. Clearly show sequential and consequential progression

Communicate clearly
6. Focus on the key elements
7. Avoid too many arrows and feedback loops
8. Remove anything that does not add meaning
9. Ensure readability
10. Avoid trigger words or mysterious acronyms.

*Adapted from Guidelines to the DCED Standard for Results Measurement: Articulating the Results Chain by Adam Kessler with Nabanita Sen, April 2015.

Measurement and Projection

The next sheet of the IG is the most important one for monitoring and results measurement works. In this section, Shomoshti records the relevant indicators for every box in the results chain and the detail measurement plan for those indicators. It also records the projections and the actual values against those. This is a complete sheet for measurement plans and projecting and capturing values against the indicators of the results chains. At first, the box numbers and all the statements in the boxes are described in the first 2 columns. Then the indicators against the change statements in

the boxes are defined in the relevant columns. Indicators can be of basically two types-Quantitative indicator and Qualitative indicator. Quantitative indicators are those which refer to any value or figure which is quantifiable like number of people, volume of income, percentage of change etc. And Qualitative indicators are those which deals with qualitative issues like opinion of the stakeholders on any business model, willingness of service providers to continue the changed practices, effectiveness of the trainings etc. which are not quantifiable. There can be also another type of indicators named Proxy indicators which are basically to use some other quantitative or qualitative indicators to find the value or any other qualitative or quantitative indicator. Proxy indicators are used when the value of the 'actual' quantitative or qualitative indicator is hard to define. In those cases, we use proxy indicators. For example, if any qualitative indictor for any project is 'advancement in women empowerment', it might be hard to define. Now the project may want to use some other quantitative or qualitative indicators to get a collective estimation of measurement against that single indicator. It can be the decision-making power of women, their access to different resources, their mobility etc. All together these indicators might provide an estimation of empowerment.

Box #	Box Title	Quantitative Indicators	Qualitative Indicators	Measurement method/ Means of verifi	Persons responsible	Scheduled tim

Details of Calculations	Assumptions	Sources of assumptions	Unit	Inception till December 2017		January - June 2018		July - December 2018		January - June 2019		July - December 2019	
				Projected	Actual	Projected	Actual	Projected	Actual	Projected	Actual	Projected	Actual

DCED standard suggests 3 common indicators for any project. Those are Outreach, Income and Employment. All three of these or any one or two may be applicable for any single intervention. Outreach is of three types- Access outreach, Usage outreach and Benefit outreach. **Access Outreach** is the number of people to whom the product or service has been made available or the number of people who can use the product or service if they wish to. **Usage Outreach** is the number of people who finally used the product or service. And **Benefit outreach** is the number of people who finally could make some additional profit using those products or services. Here 'Additional' means additional compared to the before income or compare to the additional income of the control group. For example, if a beneficiary could make a profit of 10 USD earlier and now after being involved with the intervention makes 15 USD profit, then if they are not comparable with a control group, we can say that he is making a 5 USD additional income for our intervention, not 15 USD. But at the same time, if they are comparable with a control group and the control group members were making a 10 USD income earlier and now could make a 14 USD additional income in average, then the attributable additional income would be just 1 USD, not 5 or 15 USD. Details of these concepts are discussed in the attribution method part later.

Each results chain box describes any change statement because the results chain is all about some changes and it shows how the flow of results from the changes lead from activity to impact level. The indicators are used to measure these changes. So, if the results chains are well articulated, the change statements lead to the indicators. If the change statements become results oriented, the statements become indicative and then defining the indicators become very easy.

There can be one or more indicators for any change statement. But there should be at least one indicator for every box because it ensures that we are measuring all the changes we are committing or anticipating through the interventions. But there can be a lot of indicators and not all the indicators are useful. Here are some suggestions* to follow while defining indicators for any results chain

- There should be an appropriate mix of quantitative and qualitative indicators
- Indicators should capture all main types of target groups
- Is the indicator useful to make a decision? – ask this question before putting any indicator in the measurement plan

Quantitative:
- There should be Scale and Depth indicator at each level – how many have experienced the change and how much change have they experienced
- The indicators should be Realistic and Practical – no indicator should be included which is not possible to measure for the project for different issues
- Make clear indicators of volume (numbers not only %)

Qualitative:
- Key qualitative information should be verified: incentives, why/why not and how
- Make a separate document with key qualitative info (not in measurement plan)

Adapted from Advanced workshop (DCED, 2012)

So, the good indicators should be
- Relevant
- Precise
- Measurable
- Time-bounded
- Realistic
- Useful

One last tip for defining indicators is, use separate rows for every quantitative or qualitative indicator. The next column is for identifying appropriate measurement method/means for verification against the indicators and that is applied for all the quantitative/qualitative indicator. It can be any of the measurement methods like observing records, observation, survey, Key Informant Interview (KII), In Depth Interview (IDI), FGD etc. Details of the measurement methods are discussed in the data collection tools and methods section. The next column is for the name of the person responsible for the verification of that indicator and that should be different people for different indicators. It can be someone from the implementation or the MRM people or a shared responsibility. But someone specific needs to be made responsible to ensure that someone knows that it's his/her responsibility to verify any specific indicator. The next column is for the scheduled time for the verification of that indicator. The next four columns are basically for the projection part at the end of the sheet. Shomoshti will record projections against the major indicators for the lifetime of the intervention or even for later period if appropriate. The total time of Shomoshti is divided into 8 periods- Inception, January - June 2017, July - December 2017, January – June 2018, July – December 2018, January – June 2019 and July – December 2019 and January – June 2020. Against every major quantitative indicator, the total projection will be divided in to semester basis. After every semester, the actual figures against the projections will be updated in the associated actual columns. Here are some basic tips for projection

- What decisions will projections help you make? – why you make them steers which projections you need to make
- Project those indicators that lead up to the next box or till the impact level
- Work with implementation team to develop figures
- Update projections as measurement data comes in
- Make system for keeping clear which numbers in results chain are projections and which are measurements after change has occurred
- Don't confuse projections with measurements
- Get info from secondary sources and own research
- Account for optimism bias
- Don't base projections on one outlier
- Use credible data sources
- Get info on prices for different product qualities
- Understand the units of measurement
- Be clear and transparent about how projections were made and assumptions
- Delay projections to when they make sense

Source: Advance workshop (DCED, 2012)

The 'Details of calculation' column is for showing how the figures in the projection or calculation column are being calculated. The 'Assumptions' column is for documenting the assumptions behind the calculations. And the assumptions need to be based on some solid ground or source which would be recorded in the 'Sources of assumptions' column. Finally, the 'Unit' column is for mentioning the units of the figures in the 'Projection' and 'Actual' columns. Following are some tips for better calculation practice

- Project intermediate indicators to appropriate dates (clearly specify dates) when change can be expected
- Write down assumptions, calculations, sources and info gaps
- Count the number of seasons/years that target group will benefit
- Make calculations detailed and clear
- Link assumptions to calculations (e.g. have a calculation box/explanations)
- Put units in adjacent column to the number, in excel
- Make sure you're calculating additional not total
- Anticipate how/when assumptions will be verified
- Include systemic change in projections when expected – copying and crowding in with evidence or assumptions as above

Source: Advance workshop (DCED, 2012)

'Baseline info' sheet is simply for recording the important information from the baseline study.

One vital issue to be considered for projection is clearing overlap. Overlap can occur in different levels like under one intervention among different seasons or years, among different interventions, among different sectors etc. But important to keep in mind that overlap is only applicable for outreach, not for income. So, we should not count the same beneficiary twice but impact from different intervention or season should be claimed.

The basic rules for calculating overlaps are following
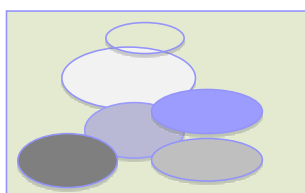
Interventions 'touch', but no significant overlaps:	One intervention determines most outreach:	Overlaps significantly influence:
Add it all up	**Take the big one**	**Estimate the overlap and deduct it from total**
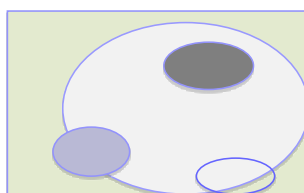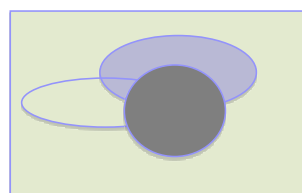
Overlap less than 5%:   add it all up (so no corrections)
Overlap more than 95%:   only the biggest (so no 'adding' at all!)
Overlap between 5 and 95%:   estimate each overlap(s) and show calculation
Overlaps can be "results chain based, geographic and time wise"
Source: Advance workshop (DCED, 2012)

Systemic Change

The systemic change sheet consists the 'Systemic Change Tracker's of Shomoshti. Shomoshti uses this tool to project and evaluate the anticipated systemic changes due to the interventions. The systemic change tracker shows how the interventions are planned to bring changes in the systems, the systems can be either any specific market or any specific social service systems.

The 'AAER' framework or 'Adopt Adapt Expand Respond' framework is used to track the status of systemic change by showing the changes taken place in the system. The intervention is at 'Adopt' level when the intervention is at the pilot level or the usual implementation phase. At this level, the intervention model is tested for the first time and if the model is proved to be beneficial for all the actors, then the intervention moves from 'Adopt' level to other levels. If the intervention is not working, it stays at the 'Adopt' level. The indicators of the 'Adopt' level are the different indicators for different activities of the intervention. In different rows of the 'Adopt' level, the indicators are listed like one company is hiring 60 extension workers for supporting their customers or one government body is arranging 10 awareness building events etc.

If the 'Adopt' level is successful, then the partners and the service providers start incorporating the model in their main business and practice with their own investment. That is the 'Adapt' level. Say the companies are buying new machineries for expanding the business model tested in 'Adopt' level or the social service providers are providing trainings to their other staff to offer better services in their other branches. Shomoshti can still be associated with the partners or the service providers but the service providers need to invest in some form by their own beyond the contractual obligation.

The intervention may be called at 'Expand' level if the competing service providers start copying the business or service model introduced by the intervention. This can happen immediately after the 'Adopt' level but generally interventions go to 'Adapt' level before entering the 'Expand' level. 'Expand' can also happen if the partners apply that business or service model in a completely new geographic area. The usual indicators can be number of similar type of actors offering the same products or services.

'Respond' happens when some other market or system respond to the changes brought in the desired market or system. This can be quite unpredictable and happen at any level. Say government changes any policy responding to the changes in targeted market or system or may be NBR declares a tax rebate to financial organizations if they provide loans for agricultural initiatives etc.

Study Calendar

The study calendar is designed for planning the upcoming studies so that Shomoshti knows when the studies are due and can take preparations accordingly. In the calendar, the intervention names, codes, start date, end dates are recorded at the first few columns. Then the plan is recorded for different studies. Generally, 3 studies are conducted in the lifetime of a usual intervention. At the beginning one baseline is conducted, then after one year or one cycle, it's time for an Early Sign of Impact Assessment (ESIA) to get the indication of where the intervention is leading to and finally at the end of the intervention, the final impact assessment is conducted. There can be also some special studies like employment study, gender study etc. Shomoshti will also conduct a special household survey every 6 months to measure progress of different impact, output and outcome level indicators. For every study, there would be columns for expected starting date and expected sample size. The study status can be not done, delayed, expected, completed or on going. Type of conduction can be either in-house, outsourced or a mix of those. An attached interactive visual representation will help Shomoshti to know the frequency of studies in the upcoming months.

For conducting the periodic and needs based study, Shomoshti will sign MoUs with at least 4 educational/research institutions. The educational/research institutions are expected to be regional ones so that Shomoshti will have a contribution in building the capacity and creating work opportunities for the local institutions and at the same time can utilize their leverage points of being the local ones. This will serve the mandate of Shomoshti to capacitate the local institutions.

Shomoshti Results Aggregation System (SRAS)

The Shomoshti Results Aggregation System (SRAS) has two parts in it. The first sheet is for the common indicators for all the interventions. These indicators will be updated through the regular impact assessments for the interventions. These sheets will be updated from the individual projection sheets of the IGs for the single interventions. For

this reason, this sheet is synchronized with the different time periods of the projection sheet. The entry to this sheet would be only to the incremental columns. The cumulative columns will be updated automatically for the immediate cell and the following time periods as well. After the common indicators, there is option for calculating unoverlapped outreach, poor portion of the outreach or the female outreach separately. Just the percentages need to be calculated through the assessments and need to be put in the % columns.

All the next sheets for impact, output or outreach will be updated based on the findings from the six-monthly household survey. There will be targets set at the beginning for different semester for Shomoshti against all the indicators. The achieved columns will be updated after the six-monthly household survey every six months. For every indicator, a graph will provide a visual form of comparison between progression of the targeted and achieved figures.

Quarterly Review Meetings in Shomoshti

The major responsibilities of the MRM system in Shomoshti are reporting unquestionable updated results and helping the management in taking informed decision by providing real time updates and raising timely flags. For all these purpose, the MRM system will lead in arranging Quarterly Review Meetings and the base of the meeting would be IG revision. IG is the single document which contains the total updated picture of any intervention. The review team members will revisit the strategies, go through all the components of the IGs, make the necessary updates and update the projections based on the changes made. The review meetings will generally be arranged on the 3rd week of the end months of the quarters. The updated projections will directly feed the Shomoshti Results Aggregation System which will help the management in reporting the updated results more easily for the periodic reports and get an updated view on where the project is heading to.

Quarterly Review Meetings	
Frequency of the Meetings	Once in every quarter
Scheduled time for the meetings	3rd week of every last month of the quarters
Length of every meeting	One day for every intervention
Led by	Unit Lead and MRM Manager
Other participants	Relevant Implementation and MRM team member
Purpose	• Review the Results Chain and Strategies based on the market updates and make necessary updates • Update Measurement plans based on the changes made • Update the Projections and Results based on the changes
Agenda	• Where are we now?

	• What are the updated information obtained from the market observation/ any study/ assessment? • What is working and what is not and why? • What are the reasons for things not working? (if any) • What changes need to make to deal with the changes? • Update the Strategy, Results Chain, Measurement plan and Projections based on the changes • Review the projection again (Are we on track? Are the targets still achievable? What changes need to make to achieve the targets?)
Output	Updated Intervention Strategy, IG and Projections
Responsibility	MRM Manager

Attribution Methods

Attribution is a vital part of results measurement for the projects following market development approach. While direct approach projects just claim any farmer/ (Micro, Small and Medium Enterprises) MSME who directly received facilities from the project as 'Beneficiary', in market development approach calling a farmer/MSME a 'Beneficiary' requires a rigorous exercise. As in market development approach, the target audience are reached through market actors or service providers, among the farmers/MSMEs who used the products or services promoted by the actors with facilitation from the project the ones who made more profit than the farmers/MSMEs who did not used those products or services, those farmers/MSMEs are called 'Beneficiaries'. Or at least, the project needs to confirm that the people made an additional profit which they could not make if the project facilitation were not there. So, before calling them 'Beneficiaries', the project needs to be sure that its 'Treatment' groups could make better profit than others or before and that was due to the products or services the project promoted. For that reason, the attribution strategy needs to be very justified so that the project does not claim any achievement caused by other market factors.

Shomoshti is trying to improve the lives of the rural households through better products and services from the market actors and social service providers. But these competitiveness are often influenced by other market, socio-political and environmental factors. To assess the effectiveness of the activities Shomoshti is undertaking, the project needs to determine that the measured changes are due to the project activities as opposed to other factors. So, Shomoshti can claim the 'Attributable Impact' which refers to the amount of change found from actual measured change – the change that would have taken place without Shomoshti.

Fig.: Net Impact
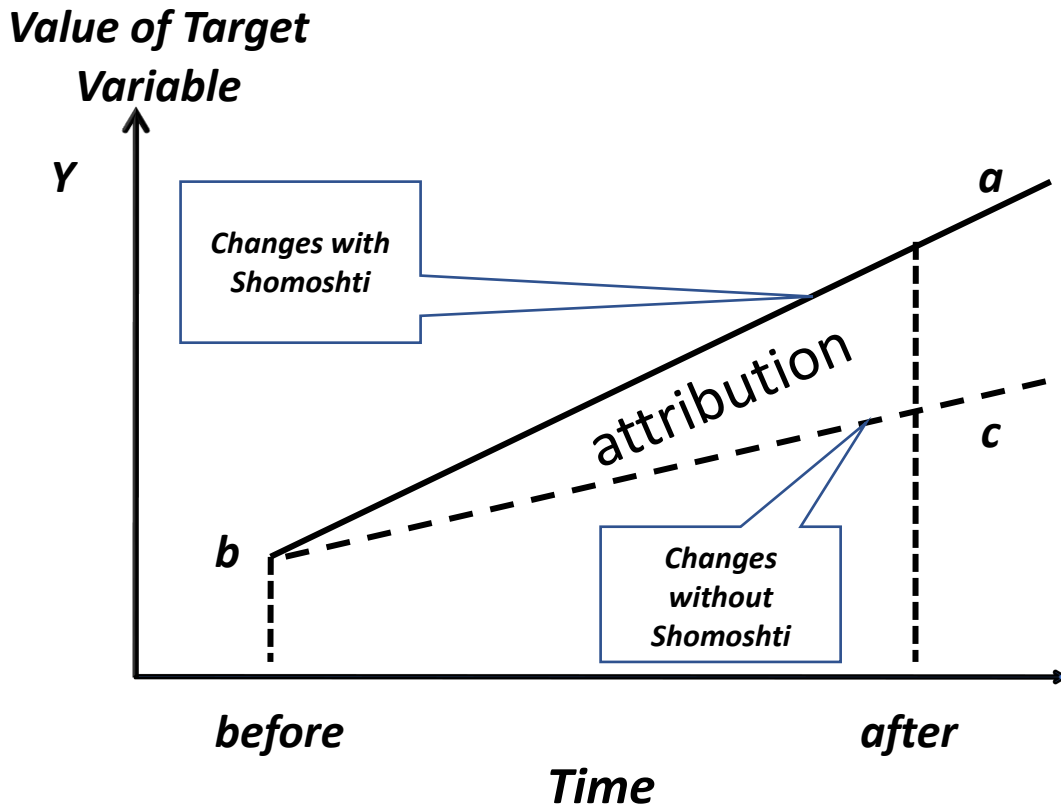
Value of Target Variable

Y

Changes with Shomoshti

attribution

a

b

Changes without Shomoshti

c

before   **after**

Time

'b' is the point where the targeted people were before the intervention and 'a' is the point where the targeted people are after the intervention. Now, even if the Shomoshti were not there, some changes might had taken place in the lives of the targeted households and the service providers. That change is shown by the point 'c'. So, Shomoshti will not claim the whole change of 'a-b', but it will claim the change of 'a-c' which was generated due to the activities of Shomoshti. The change 'c-b' is generated by all the other factors and that would be deducted from the actual claim to make it unquestionable.

For the attribution of the project's achievement, CSISA-MI will follow the standard attribution methods. But it's up to the M&E specialist to determine the most appropriate attribution strategy for any study at that point of time. Which attribution strategy to be followed is often decided upon the available information and resources. That can be any of the following attribution methods

➡ Before After Comparison
➡ Comparison Groups
➡ Quasi Experimental Design
➡ Trend and other analysis to establish counter factual

It's noteworthy that these are not the only attribution methods but these are the most appropriate and applicable ones for a market and social development project like Shomoshti. As mentioned at the very beginning, this manual only discusses the issues which are relevant for Shomoshti. For discussing the attribution methods, we will use the following notations

D = Value of the indicator
      Ta = after value of the treatment group
      Tb = before value of the treatment group
      Ca = after value of the control group
      Cb = before value of the control group

Treatment groups are the people who were affected by Shomoshti interventions and Control groups are the ones who are of the same profile of the treatment groups in terms of economic and other profiles like geographic, market and service access etc. but the only difference is they are not affected by Shomoshti interventions.

Before After Comparison
Before after comparison method is appropriate when the intervention is not expecting any other factors to have significant contribution to the change took place in the lives of the treatment group. Here we don't compare with any control group. We just deduct the 'Tb' from 'Ta'. So, using Before After Comparison method, the value of 'D' is

D = Ta – Tb

Before after is appropriate when Shomoshti will try something purely new like promoting a new product or service in a locality when there is no appropriate comparison group.

Comparison Groups
In Comparison Groups method, the after value of control group is deducted from the after value of treatment group. It is done so to eliminate effect of all the other external factors. Here we don't need to collect the before values because this method assumes that the treatment and control group is the same except the fact that the treatment group were affected by the intervention and the control group were not. So, following the Comparison Group method, the value of 'D' is

D = Ta – Ca

Quasi Experimental Design
But in reality, it's really hard to find the proper Control group. Specially for market and social development projects like Shomoshti, usually the treatment group are the people who are a bit progressive than others because this sort of projects always try out new products or services and for regular poor people, it's hard to try out new things as they are not confident that if this new products or services don't work, they will still manage to survive. So, generally for projects like Shomoshti, the treatment group people usually

are found to be a bit progressive than the control people. For these cases, we apply the Quasi Experimental Design. This method is also called Difference in Difference (DiD) method because in this method we calculate the difference of two differences.

Following this method, it is ensured that impact of all the internal and external factors is eliminated to perfectly attribute the achievement of Shomoshti. Stepwise the method is following
Step 1 = Collect the before and after information of the treatment group
Step 2 = Collect the before and after information of the control group
Step 3 = Compare the before and after data of the treatment group and find the difference
Step 4 = Compare the before and after data of the control group and find the difference
Step 5 = Compare these two differences of the treatment and control groups and find the Difference in differences.
In short following this method, the value of 'D' is

$$D = ((Ta - Tb) - (Ca - Cb))$$

Now it should be mentioned that to find out the 'Usage to Benefit' ratio, we need to find out how many of our usage outreach/ treatment group people could make an additional income compared to the before income or additional income of the control group.

Trend Analysis
Trend analysis is usually used for attributing the changes at partners' or service providers' level. Here, we need to collect previous record of business for last 3 to 4 years to estimate where the business might had reached without the support of the project. A pseudo point 'c' is first defined and then a before after analysis is applied.

Data collection Tools and Methods
Process flow of evaluation
The usual data collection in Shomoshti will maintain the following process

- ➡ **Goal** – Define the purpose of the study, how the study will be used by Shomoshti
- ➡ **Location(s)** – Specifying which locations will be part of the study
- ➡ **Population** – Knowing the target groups of the study
- ➡ **Attribution Method** – Deciding which attribution method is applicable for that specific study
- ➡ **Data collection tools** – Selecting the appropriate data collection tools for the study
- ➡ **Sample size** – Calculating the suitable sample size for the study
- ➡ **Sampling composition** – Knowing the sample distribution of the study based on specific locations and target groups
- ➡ **Questions** – Developing the tools like questionnaires, checklists etc. for the study

- ◈ **Data Gathering** – Collecting the data from the field or through other sources
- ◈ **Data Processing and Analysis** – Cleaning the data and analyzing to extract the information
- ◈ **Reporting and Use of Evaluation** – Preparing the report focusing on the use of the evaluation
- ◈ **Limitations** – Documenting the limitations which the study had to struggle with

Sampling methods

Sampling methods can be of two types in broader sense- Random sampling methods and Non-random sampling methods. Both the sampling methods have their sub-types.

Random sampling methods
- ◈ Simple Random Sampling
- ◈ Stratified Sampling
- ◈ Cluster Sampling
- ◈ Mixing sample designs

Simple random sampling
Simple random sampling is taking the samples from the population randomly. All we need is to define the population first and then taking the samples randomly from that.

Stratified sampling
Stratified sampling starts with dividing the population in to sub-groups in terms of different areas or types of target people. Then samples are taken randomly from those sub-groups.

Cluster sampling
Unlike simple random or stratified sampling, cluster sampling doesn't necessarily take the whole population in consideration. It takes some targeted groups as clusters and take random samples from those clusters. This sampling method is being applied when information on specific groups is the focus of any study.

Mixing sample designs
This sampling method is used when we mix up different sampling methods for any single study for practical reasons and to explore the situation of different focused groups.

Non-random sampling methods
- ◈ Convenience sampling
- ◈ Snowball or referral sampling
- ◈ Purposeful or judgment sampling

Convenience sampling
Convenience sampling is taking samples based on the convenience of the project. This method is sometimes applicable when there are practical limitations for taking samples.

Snowball or referral sampling

Snowball sampling is taking some initial samples and reaching out further samples through taking reference from the initial samples and the process goes on. As getting the further samples depends on the reference from the samples of the earlier level, it's called snowballing sampling.

Purposeful or Judgement sampling

For purposeful sampling, the samples are taken purposefully and based on some pre-defined criteria set by the researcher. The researcher knows whom to take as samples from before. Generally, a small number of samples are chosen from a comparatively smaller population.

Sampling errors

But there are some areas of error about which the researchers need to be very concerned of. Following are the general errors found in selecting samples
- Geographic bias
- Response bias
- Self-selection bias

Common type of sample bias	Description	Ways to improve it
Geographic bias	It is easier to conduct interviews in areas which are easily accessible, for example, because they are close, have good road access. However, people living in these areas may be different (typically wealthier) than those living in more remote areas.	Use the below sampling designs to ensure that you cover a representative set of areas. If you still suffer from geographic bias, for example because it is too costly to visit really remote area, consider conducting additional secondary analysis or interviews to test whether the area you missed is significantly different.
Response bias	Some cultural/ethnic/socioeconomic groups might be more likely to answer a survey than others. This can be for many reasons. For example, women may be less willing to speak to strangers in some societies, leading to fewer women answering a survey.	If this is a big concern, stratify the survey (see below) to ensure that you have a representative sample. You can also plan to address this issue. For example, if you know that farmers will not answer during the day because they are out in the field, conduct the survey during the evenings.
	If participants in your survey have a choice about whether they will	As far as possible, deliberately select your respondents using the

Self-selection bias	respond or not, then participants who respond may be significantly different to those who don't. For example, if you send a written survey out to 1000 customers of a business, it may be that only those who are really happy (or unhappy) with the service can be bothered to reply.	below techniques, rather than relying on them to respond to your survey. Monitor how many people fail to respond to your survey, and consider self-selection bias in your analysis.

Taken from Practical Advice for Selecting Sample Sizes William Fairbairn and Adam Kessler. Sample Size Calculator by Richard Tanburn. May 2015

Selecting sample size

Sample size can be selected following different methods like the following ones

- ➦ Statistical rules (like web based calculators)
- ➦ Rule of thumb (like square root of population)
- ➦ Rule of thumb

How many people to interview (sample size)		Interviews, FGDs, Stakeholder Meetings	Surveys
	Size of the population – total number of people represented by the sample	Purposive sampling to get different view points; be flexible with sample size if possible; stop when you're not learning anything new.	**Rule of thumb: interview 10% but not less than 30 randomly chosen**
	How big are the differences among people likely to be?	Can people be divided into categories (size of enterprise, geographic area, women/men etc.) based on how/to what extent they have probably experienced change? **Then stratify the sample.**	
		Interview at least a few in each strata with a minimum of 3 (so that there is scope for some comparison) As above, be flexible when possible.	**Rule of thumb: not less than 30 for each strata**

* Source: Advance workshop (DCED, 2012)

For applying the statistically significant sampling size, the following issues should be considered

Error of Margin (The Level of Precision)
The *level of precision*, sometimes called *sampling error*, is the range in which the true value of the population is estimated to be. Thus, if a researcher finds that 60% of farmers in the sample have adopted a recommended practice with a precision rate of ±5%, then

he or she can conclude that between 55% and 65% of farmers in the population have adopted the practice. Lower margin of error requires a larger sample size. 5% is a common choice.

Confidence level
The confidence level is the amount of uncertainty you can tolerate. The true answer is the percentage you would get if you exhaustively interviewed everyone. In other words, this means that, if a 95% confidence level is selected, 95 out of 100 samples will have the true population value within the range of precision specified earlier. Higher confidence level requires a larger sample size. 90%, 95% and 99% are typical choices.

Distribution
For each question, what do you expect the results will be? The *degree of variability* refers to the distribution of attributes in the population. The more heterogeneous a population, the larger the sample size required to obtain a given level of precision. The more homogeneous a population, the smaller the sample size. Because a proportion of .5 indicates the maximum variability in a population, it is often used in determining a more conservative sample size. If you don't know, use 50%.

Example: Options for a population of 10.000 farmers

	Distribution	Margin of error	Confidence
	50%	5%	95%
Suggested sample size	370		
	50%	5%	90%
Suggested sample size	264		
	50%	10%	95%
Suggested sample size	96		
	50%	10%	90%
Suggested sample size	68		

* Source: Advance workshop (DCED, 2012)

Evaluation methods
Evaluation methods can be of 3 types- Quantitative, Qualitative and Mixed method of evaluation.

Quantitative Evaluation
Quantitative methods are used when the evaluators want to conduct statistical analysis, cover large samples, or seek precision.

Qualitative Evaluation
Qualitative methods are used when in-depth information is the key, sample size is not an issue.

Components of Evaluation Methods

	Quantitative	**Qualitative**
Advantage	Relatively easy to administer	Captures more depth and provide insights as to the "why" and "how"
	Can include large number of questions	Emphasize validity
	Can yield large samples	Easier to develop
	Emphasizes reliability	
Disadvantage	Data may not be as rich or as detailed as qualitative methods	Time consuming to capture and analyze
	Usually are harder to develop	More subjective and may be difficult to summarize and compare systematically
	May not provide sufficient information for interpretation	Difficult to have large sample
		Very demanding to administer

Mixed method

When an evaluator combines elements of qualitative and quantitative method for the broad purposes of breadth and depth of understanding and corroboration.

Source: Johnson, Onwuegbuzie and Turner (2007)

Mixed method is the usual one which is followed by most of the evaluations as we need to know both quantitative results and qualitative explanations. Shomoshti will also follow the same. The attributes of the Mixed evaluation method are following

Types	Definition	Features
Triangulation	Triangulation refers to using different methods to study the same phenomenon. This improves the reliability of results, as unreliability or bias in one method can be balanced out by the use of another.	1. Gives equal priority to both quantitative and qualitative data. 2. Collects both the quantitative and qualitative data simultaneously 3. Compares the results from quantitative and qualitative analysis to determine if the two databases yielded similar or dissimilar results. 4. There can be data triangulation (use of multiple source), investigator triangulation (using of multiple researchers), theory triangulation (testing of multiple theories to interpret results)

Types	Definition	Features

Complementarity (Explanatory)	Seeking elaboration, enhancement, illustration, clarification of the results from one method with results from the other method	1. Priority on quantitative data collection and analysis. 2. Collect quantitative data first in the sequence. 3. Qualitative data is used to refine the results from the quantitative data.
Development (Exploratory)	Using the results from one method to help inform the other method	1. Emphasizes the qualitative data more than the quantitative data. 2. Sequence to data collection, first collecting qualitative data followed by quantitative data. 3. Quantitative data used to build on or explain the initial qualitative findings.

Source: DCED Guideline on Good Research Practice (Jalil, 2013)

Data Collection Methods

There are different data collection methods for gathering information and verifying the assumptions. Some are used for monitoring and some are used for evaluation. The most commonly used data collection and verifications tools and their uses are mentioned below

Tools	When to use the tools
Records	Convenient way to get quantitative data When stakeholders have sufficient records and are willing to share them To get an indication of the degree of adoption of a model among stakeholders
Secondary data	As sources for projection In some cases, to establish counterfactuals
Key Informant Interview	To gather information on specific issues which will be addressed in the intervention To use as a source to enable projection To explore causality
In-depth interviews	To gather qualitative and quantitative information from a small number of respondents To explore the change process in depth (the nature of change processes and opinions of the changes) To explore causality Useful for reporting impact IF information is triangulated Normal sample size is around 15-30 people purposively selected
Observation	Quick assessment of what is happening and how Particularly useful tool at activity and partner outcome level To explore the process of change or validate data from other sources Combined with regular field visit

FGD	To gather qualitative and quantitative information from small number of respondents.
	To explore the change process in depth (the nature of change processes and opinions of changes)
	To explore causality
	To understand collective behaviour or perceptions
	The normal group size is around 8-15 people purposively selected
	It requires an experienced moderator
Survey	To gather quantitative data (and simple qualitative data) from a large number of respondents
	Survey can provide statically robust data required for impact assessment and reporting
	Can be done in-house for small surveys or outsourced for larger ones
	Samples can be drawn randomly or purposively as long as a) they are reasonably representative and b) method and limitations are documented

Tool development

Types of questions

One major part of any evaluation is tool development. Tools can be of different types like questionnaires or checklist etc. And the questions can also be of different types like the following categories

- Open questions:
    - Open numerical questions
    - Open text questions
- Closed questions:
    - Multiple choice
        - Qualitative
        - Quantitative
    - Yes, no
- Combined:
    - Allow comments on closed questions!

Here are some guidelines for developing the data collection tools

- Define use of questionnaire (database, tabulation of qualitative information etc.)
- Select and train interviewers (also internal ones)
- Pre-test
- With complex set of questions: draw a contingency flow chart *e.g. increase of income -> due to what? -> what was the reason for it?*
- Announce goal/justification, incentives, confidentiality at the beginning
- Translation: get re-translation for control groups
- Keep questionnaire short, do not ask "interesting to know" questions

- ➥ Always set the important questions first
- ➥ Maintain logical flow
- ➥ Where logical flow permits, add control questions *e.g. did you have an additional income? … How much you earned in the last season? And before?*
- ➥ Minimize branching (if no, go to question ...)
- ➥ Put easy questions (personal data, PPI etc.) at the end

Following are some tips developing efficient and effective questionnaires

- ➥ Use simple direct language
- ➥ No ambiguous questions
- ➥ No threatening questions (ensure confidentiality)
- ➥ Only one dimension per question *e.g. not combine household members with their engagement in farm activities*
- ➥ Avoid highly variable adjectives *e.g. many, most, more etc.*
- ➥ No presuppositions or suggestive questions *e.g. not suggest that he had access to a service*
- ➥ Be neutral, avoid emotionally loaded questions
- ➥ For multiple choice:
  - ➥ Ranking: max. 5 items
  - ➥ Include "others", when not sure that there are additional alternatives
  - ➥ "don't know" only for factual questions (not on attitude)

Poverty Measurement in Shomoshti

For measuring poverty level of the beneficiaries, Shomoshti will facilitate PPA (Participatory Poverty Analysis) at community. In the process, the following steps are involved to identify the targeted project beneficiary, to engage community in the project activity as well as empower community to claim their rights to the relevant public private service providers. Basically, we are tailoring some of PRA tools for this specific analysis to serve multipurpose of project theme.

 The following steps are involved in the PPA process:
1. Transect walk
2. Well-Being Analysis (WBA)
3. Participant selection (based on the WBA ranking (rich/middle/poor/extreme poor and consideration of participant selection criterion of project, i.e., 70% poor, 40% disadvantaged and 30% marginalized women)
4. Producer and non-producers beneficiary list finalization
5. Community Action Plan (CAP)
6. Rapid Market Analysis (RMA)

The review of the WBA process will give us the status of progress out of the poverty of the community/ beneficiary of the project. It will give us community based perception but we can't say it statistically valid. For this, Shomoshti will incorporate Progress out of Poverty Index (PPI) for measuring poverty by Grameen Foundation in its regular survey like baseline, bi-annually and end line survey. The index consists of a questionnaire and an associated scoresheet to measure the poverty level. The details of both the tools is attached here in the annex.

Annex 1- CARE's Participatory Performance Tracking Tool

C ARE' s Participatory Performance Tracking Tool

Figure 1 Countries where the PPT is being used from the monitoring and evaluation of CARE programs.

The Participatory Performance Tracking Tool (PPT) enables a program to track individual and group level adoption of key behaviors in order to streamline data collection and strengthen program results. This tool was developed in 2009 for the Strengthening the Dairy Value Chain (SDVC) in Bangladesh, where it was used with 36,000 women working in the dairy sector. The model was improved in Bangladesh over the course of three years, where it reached 50,000 households. In 2012, CARE's six country Pathways to Secure Livelihoods program adopted the PPT to reach 50,000 women in agriculture beyond the dairy sector. Finally the Graduation with Resilience to Achieve Sustainable Development (GRAD) Project in Ethiopia adopted the PPT to support 65,000 participant households measure their success in regards to increased food security. CARE Ethiopia has applied the PPT to multiple food security areas including agriculture, finance, gender, nutrition and climate change. To date, the PPT has been used in 7 countries across Africa and Asia and has been applied in 15 value chains.

What is the Participatory Performance Tracking Tool?

The PPT is both as management tool and an outcome monitoring tool. It allows for the evaluation of **group dynamics** and **performance**, with support from group leaders and field facilitator coordinators. Meetings should be organized regularly to conduct the tool, facilitate dialogue around adoption of key behaviors and practices, and capture data on individual and group performance. This data can be aggregated at the district, regional, national or global level in order to analyze how groups progress over time. Data may also be disaggregated by the year that groups began participating in the program to determine success at different time points. Cohorts can be compared in order to

PPT Value Chains

Bangladesh: dairy, indigo, chili peppers, and potatoes
Ethiopia: livestock fattening, honey, pulses, barley and maize
Ghana: groundnuts and soy
India: blackgram and rice
Malawi: groundnuts and soy
Mali: rice, millet, and shallots
Tanzania: sesame and cassava

learn what is
be gaps in

Data from to
practice
inclusion, or
identification
allows CARE
what causes
inform
managers
struggling
with a means
empowers
individuals
which
improve.

History of the PPT

From 2007 to 2012, CARE Bangladesh implemented a dairy value chain project that sought to double the dairy-related incomes of 35,000 smallholder farmers. Needing to track participant adoption rates of 10 key dairy management practices and wanting to create a tool that would help groups monitor their own progress, the team created the first participatory tracking tool. Ultimately, CARE Bangladesh applied the PPT with over 1,200 producer groups during the project. The tool has since been adapted both in Bangladesh and beyond, supporting CARE's work in 7 countries and across over 3,000 groups.

working in the field and where there may program implementation.

the PPT may also be analyzed according area, such as agriculture, financial nutrition. This allows for the of **high and low performing groups** and to study what makes them successful or them to struggle. The PPT may also **management decision making**, and may reallocate staff and resources to groups. Finally, the PPT provides groups to assess their own progress, which and creates transparency. Groups and identify their own performance gaps, creates momentum and pressure to

The PPT can be structured to capture information on the most common activities completed by a group, as well as factors of particular importance to a program, including gender

inclusivity, savings, and broader financial inclusion. However, the tool does need to be tailored to each value chain promoted by the initiative because the practices for adoption are unique to each value chain.

A Two-Part Monitoring and Evaluation Tool

The PPT consists of two parts, which allow for the monitoring of behavior change at both an individual and a group level. The Individual Tracking Sheet documents the performance of each individual group member in relation to the individual performance areas laid out by program staff and group leaders.   An example of an individual level practice that could be included on the Individual Tracking Sheet is the adoption of an improved seed variety. The Group Maturity Sheet tracks the performance of the group as a whole, and documents how the group is working together on topics such as leadership, record keeping, and gender equity. An example of a group capacity that could be included on the Group Maturity Sheet is the practice gender equitable governance in the group. Evaluating a combination of individual practice adoption and group capacities allows for a more comprehensive picture of what is happening at both the individual and the group level as a result of your program. However, you do not need to adopt both the Individual Tracking Sheet and the Group Maturity Sheet if your program is only interested in monitoring one of these dimensions of behavior change.

Group #	Practices					Total
Member	1	2	3	4	5	
101	X	X	X		X	4
102		X	X	X		3
103	X		X			2
104				X	X	2
105		X	X	X	X	4
Total	2	3	4	3	3	15/25

Individual Tracking Sheet

Group #	Group Capacities					Total
Member	1	2	3	4	5	
101	X		X	X	X	4
102		X	X		X	3
103		X		X	X	3
104	X	X				2
105		X		X		2
Total	2	4	2	3	3	14/25

Group Maturity Sheet

PPT Case Example: Pathways Program

CARE's Pathways to Empowerment is a six country program that seeks to improve the productivity and empowerment of women farmers in more equitable agricultural systems. This program has utilized the PPT across its six target countries: Bangladesh, Ghana, India, Malawi, Mali, and Tanzania. The program utilizes 11 domains (soil and water management, group governance, gender, etc.) that are categorized into pre-planting, planting, harvest, and post- harvest across all six countries. This ensures that the monitoring and evaluation data is comparable across multiple countries.

Producer groups are engaged in 58% of the recommended practices that have been identified for their value chain across all six countries. Groups had the highest rates of practice adoption in the domains of soil and water management, post harvest management, and gender. The biggest challenges with group engagement were in the areas of marketing, record keeping and finance, and spraying for pest and vegetative disease management. The gender composition of the groups, as well as the gender of the group leader, was also indicative of adoption of practices. Groups of all females had higher levels of practice adoption in the domains of input and land selection, soil and water management, and the use of inputs. Interestingly, the performance of groups with participants of both genders was independent of gender composition; however, groups with female leaders engaged in more of the recommended

Is the PPT The Right Tool For You?

In order to determine if the PPT is the correct Monitoring and Evaluation tool to use for your project, run through the list of questions below with your team:

Are you working through groups?

Have you clearly identified and defined the capacities you are trying build or the behaviors you are trying to change?

Do you already have a clear capacity building or training plan and approach?

Would participatory review processes enrich the group capacity building approach you have already developed?

If you answered yes to all four questions above then the PPT may be a beneficial M&E tool for your project. The PPT can be adapted to a variety of groups, including producer groups, integrated VSLA groups, and maternal and child health / breastfeeding support groups. The PPT allows programs to capture multiple dimensions of food security, such as climate change, nutrition, financial inclusion, etc. However, before adopting this tool for your project, make sure that it aligns with your capacity building and/or training plan.

Developing Domains and Indicators

In order to adapt the PPT for your program you will need to follow 5 key steps. Each step is outlined below, along with key questions you will need to address along the way.

Step 1: Define key practices to be promoted in each value chain and group-level characteristics to be monitored. Take time to work through each tool thoroughly, identifying potential question or challenge areas.

> What value chains are group members engaging in?
> What are the key agricultural practices that group members are engaging in?
> How do agricultural practices bridge across value chains?

Key Things to Keep in Mind:
1. Domains must align with the practice areas you are promoting. For instance, planting.
2. Indicators within each domain must align with the key practices you are promoting. For instance, under planting you might have specific spacing and depth practices you are promoting that you want to track.
3. All indicators must be yes / no questions to simplify the process and analysis.
4. The tool need to be simple and brief enough for community facilitators to apply

Step 2: Develop draft domains and indicators for the tool. Both the Individual Tracking Sheet and the Group Maturity Sheet can be refined to align directly with specific interventions promoted by the program.

> What indicators can be collected that reflect progress
>
> on the key practices in which the group members are engaging?
> - o For example, if you are promote the adoption of a certain type of seed then you can track how many members have adopted that trying to type of seed?
>
> How are these indicators measured/ quantified?
> - o For instance, if you want to have an indicator such as 'managing a profitable income generating activity (IGA)', you need to define how 'profitable' would be measured. This needs to be part of

your training process for the group members so they can understand how 'profit' is being evaluated and then respond with the appropriate behavior change.
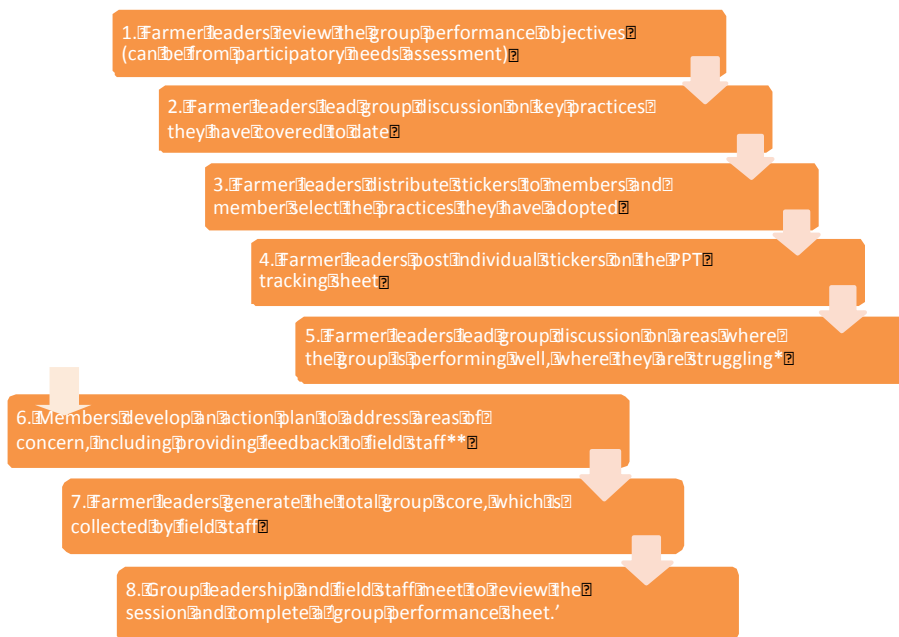
Step 3: Validate domains and indicators with key group leaders. Once draft domains and indicators are defined, they must be validated with a set of group leaders. The focus of this step is both on ensuring the domains and indicators are the right priorities and ensuring that they are simple and easy to understand. These mini focus groups allow group leaders to provide feedback on the domains and indicators that program staff have developed.

Step 4: Develop a pictorial version of each targeted practice in the Individual Tracking Sheet. Using a pictorial tool makes it easier and more engaging to apply the tool across a large number of groups and group members, including anyone that is illiterate. The pictures need to be intuitive and easy to associate with each targeted practice.
**Some teams have found that developing artwork is time consuming and have adopted check marks instead of artwork to indicate which practices on the PPT an individual or group has adopted. This approach also works as a means of tracking behavior changes

Step 5: Conduct a workshop with a sample of group leaders to refine the Individual Tracking Sheet tool. Once the pictures are identified, projects should again engage with group leaders to present the tool, train the leaders on its use, and gather input on improving it.

Facilitating a PPT Training Session

1. Farmer leaders review the group performance objectives (can be from participatory needs assessment)

2. Farmer leaders lead group discussion on key practices they have covered to date

3. Farmer leaders distribute stickers to members and member select the practices they have adopted

4. Farmer leaders post individual stickers on the PPT tracking sheet

5. Farmer leaders lead group discussion on areas where the group is performing well, where they are struggling*

6. Members develop an action plan to address areas of concern, including providing feedback to field staff**

7. Farmer leaders generate the total group score, which is collected by field staff

8. Group leadership and field staff meet to review the session and complete a 'group performance sheet.'

Questions to help identify the areas in which the group is struggling and where they are performing well:

> Which practices do not have a lot of stickers?
> What is different about the practices that have a lot of stickers and those that do not?
> What practices are easy to adhere to?
> What helps to facilitate/enable this?
> What practices are you struggling to adhere to?
> > o What prevents you from completing these practices?
> What does this teach the group moving forward?

Questions to help develop and action plan:

> What are concrete strategies that group members can apply to make progress around practices that have few or no stickers?
> What are concrete strategies that field staff can apply to make progress around practices that have few or no stickers?

How do I apply the refined tools in my project?

Step 1: **Train your staff**. Applying the tool will begin by organizing and conducting a training of trainers with your field staff. Training should take at least one day and topics should include:

- o Objectives of the tool
- o Introduction to the tool
- o Introduction to how to facilitate the participatory process
- o Introduction to how to capture and calculate the scores and justifications
- o Introduction to how to use the scoring for future planning and action

Step 2: **Engage Groups to Identify Group Level Performance Targets**. With support from CARE, each group conducts a participatory needs assessment to identify practices they want to adopt. The results of this assessment lead the groups to set performance targets.

Step 3: Train / Coach Group Leaders in Organizing and Conducting Routine Reflection Sessions. Group leaders will need training to understand how to run a basic meeting with group members to review the performance targets for the previous period, gather information from members on practices applied by each person during the current period, post the results on a large chart on the wall and then lead the group in reflecting on any necessary course corrections or challenges.

> **Monitoring Producer Group Performance Over Time**
> The PPT allows CARE to categorize producer groups according to the following performance thresholds:
>
> **Category A** - Groups that are prepared to graduate from support from CARE and whose members have collectively adopted at least **80%** of the practices promoted by the program
> **Category B** – Groups that are performing well and have adopted between **51-80%** of the practices promoted by the program. **Category C** – Groups that are lagging behind somewhat and/or struggling to adopt the practices being promoted by CARE. These may also be newly-recruited groups and will have adopted between **26 – 50%** of the practices promoted by the program.
> **Category D** – Groups that are failing to adopt key practices and may be at risk of dropping out of the program or are newly recruited. These groups will have adopted between **0 – 25 %** of the practice promoted by the program.

Step 4: **Group Leaders Conduct Routine Reflection Sessions**. On a routine basis (ideally quarterly), the leader facilitates a reflection on the group's targets and recaps key lessons from past sessions.

> Group members are asked to recall the key practices they learned about during the past period.
> The leader provides a briefing to the members on the pictures associated with each of the key farm management / financial services practices promoted in the group to this point.
> > Group members recall which practices they have adopted and collect the relevant pictures to depict those.

> Group leaders collect the relevant pictures and place these on a PPT matrix on the wall to map out who is doing what.
> Group leaders facilitate a discussion among the group about the results of the PPT exercise against the group's initial targets.

Group leaders capture the results on the PPT sheet and groups discuss priorities / course corrections for the next period.

Step 5: **Participate in the Review Session Every Six Months to Capture Group Maturity**. Every six months, a CARE or partner field staff member should join the groups to co-facilitate the review session. This will be the session during which groups and CARE calculate the Group Maturity score.

Step 6: Report and Analyze Results Every Six Months. It is critical that teams include a review process every six months to assess overall group performance and identify any critical areas for increased attention.

Objective:

- In light of the development needs, evaluate group member's progress in every 6   month, based on this they could measure their own condition.
- Through participatory observation, they will be capable to measure whether their group goals are being achieved or not.
- Able to record proper situation of the group and its member by which business goal achievement could be possible through factual bargaining.
- Group members could determine future activity plan considering their own condition and groups progress.
- In terms of group situation the dairy industry operators and service provider organizations or persons may capable to determine their activity plan to get their precise share and available benefits/priorities.
- For achieving group sustainability the practice of liability and accountability could be ensured.

Timetable:
- This type of meeting will be held in every 6 months.

Participants:

- Firstly, all group members and leaders.
- Cattle health workers, breed development workers and collectors (if possible) who are working with groups.
- Respective CARE field workers of each group.

Pre-condition of meeting:

- Meeting day has to be selected as same day of the group meeting. No conversion should occur without any specific reason.
- Have to ensure 100% presence for that meeting because this will help to examine each member's progress evaluation information.
- Need PME tools for that meeting.
- Write down every member's consecutive number (last two digits of the farmer's code) in a VIP card, which will be used as voting id in the next time of tracking individuals' practices.
- Try to ensure the presence of respective LHW and AI worker with that group.
- Sitting arrangement should be comfortable.
- Will be presented register, PNA, members CHH and other paper of group activities.
- Have to bring the previous evaluation table of PPT.
- Have to bring CARE's determined table for recording the result of the evaluation meeting.

- At least two facilitators will be present to facilitate the meeting. One is main facilitator and another will take notes that will ensure the individual opinion and group's opinion in evaluation table.

Scoring:

- At first, the group assessment table will be presented. Individual and group's assessment score have to ensure giving special importance on individual assessment indicators and sometimes by cross checking when needed.
- Every indicator has to be explained to members in an easy way. (if needed by discussing and using pictures).
- On the basis of the important matters which have been given emphasis in the individual progress evaluation table at every step, the facilitator will try to know about the span of group members' knowledge and practices and will give score emphasis on how they are practicing their learned behaviour.
- Will provide group's score base on members' opinion and observing file/paper, examine the validity of information in different ways and lay down the necessary information. Example, members' knowledge about the presentation method of marketing information, register of group activities, PNA, member's CHC and other paper, visible group activity plan, regular information collection and analysis, connection to Bazaar, good relation etc and whether they have it or not.
- All the indicators of individual assessment table except 12 and 13 will be scored 1 for YES and 0 for NO according to the opinion of present member. This type of indicators' table will be scored by conventional unit.
- The facilitator will leave their scoring table blank who will not be present at the meeting. And if someone leave the group, there table will be marked by X.
- Examine the validity of individual practice indicators and lay down according to it.
- By the time of validity examination facilitator will be aware about that it should be an improved way of rectification which is supported by project and will provide score.
- Future plans for those groups whose scores are not satisfactory. In this regard, at first we need to identify the group's responsibilities and future needs for solving the realistic problem in planning.
- Presenting generated planning in front of the group members and taking their opinion, the meeting will end by giving thanks to all of them.

Materials which need to use in meeting:

- Photocopy of PPT table (PPT table-1 and PPT table-3)
- Vipcard
- Sticker paper and necessary picture of improved method of training
- Artline – Permanent marker
- Brown paper and rope/ board/ clip/scotched for hanging that paper

Uses of meeting's information:

- At the end of meeting, future activities will be planned after checking the condition of
- members' practice level.
- Could determine the further tasks which are necessary to develop relation between groups and other individual/organization. This data will help in business communication (agreement/linkage) through negotiation. Example: total milk production in group, total sale, actual using of fodder, total cross breed cattle etc.
- Measuring implementation progress by CARE could be possible to make an informative report (based on milestone).
- To determine each group's achievement of capability through member's participatory discussions and this planning will help as important evidence to phase out and in further follow up process of group. This plan will be valid for next six month for the ongoing groups and will measure group progress in upcoming meeting.

Steps of the meeting: (1 hour 45 munities)

Task of facilitator		Facilitator
Preparation time (15 minutes)		
1. From the two facilitators, one will write down the practices of individual participatory progress evaluation table (PPT – 1) and another will write down the practices of group participatory progress evaluation table (PPT – 3). At first a VIP card will be provided to each member which will be used in the time of their practice voting. All members name, member code and other essential information have to write down in PPT – 1 (see registered paper where necessary). Sitting arrangement will have according to their member code for making it convenience to put down the practices.		CARE field worker/ Group leaders
2. Discuss the practices which have been taught over past sessions by recalling them.		CARE field worker
Indicator	Group progress scenario evaluation part (1 hour 30 minutes)	
Task schedule	They will be given score if group leader and others know about their tasks and if anywhere it has been written about their plan of milk production and marketing.	
Rules and regulations	Score will be provided examining the record/paper whether the member aware about those or not.	
Leadership process	Second line leadership is groomed other member for leadership except group leader. Score will be provided if group practices such method.	CARE field worker/Group leaders

Favorable learning		Facilitator will ensure the percentage of participation checking register of the past 3 meetings' attendance.	
Environment		Score will be ensured after verifying the indicator number 31 of PPT - 1 basis on member's opinion.	
Favorable service/External relation		In the case of score 1, it has been tried to mean that some group member is receiving service from Krishi Utsho, LHW and AI worker. Score will be ensured after verifying the indicator number 21, 22, 23, 24, 25 and 26 of PPT - 1 basis on member's opinion.	CARE field worker and group leaders
Training and orientation for project	Shed management	Score will be ensured after verifying the indicator number 1, 2 and 3 of PPT - 1 basis on member's opinion.	
	Fodder management	Score will be ensured after verifying the indicator number 3, 4, 5, 6 and 7 of PPT - 1 basis on member's opinion.	
	Health management	Score will be ensured after verifying the indicator number 08, 09 and 10 of PPT - 1 basis on member's opinion.	
	Breeds development	Score will be ensured after verifying the indicator number 11 of PPT - 1 basis on member's opinion.	
	Milk management	Score will be ensured after verifying the indicator number 12, 13, 14, 15 and 16 of PPT - 1 basis on member's opinion.	
Marketing		Score will be ensured after verifying the indicator number 17, 18 and 19 of PPT - 1 basis on member's opinion.	
Information management		Score will be ensured after verifying the indicator number 20 of PPT - 1 basis on member's opinion.	

Gender equality/neutrality	Score will be ensured after verifying the indicator number 27, 28, 29 and 30 of PPT - 1 basis on member's opinion.

PPI® Scorecard for Bangladesh

To assist with collection, organizations can use the household roster located on the second page.

Entity	Name	ID		Date (DD/MM/YY)
Participant:			Date joined:	
Field agent:			Date scored:	
Service point:			# HH members:	

Indicator	Response	Points	Score
1. How many household members are 12-years-old or younger?	A. Three or more	0	
	B. Two	10	
	C. One	16	
	D. None	29	
2. Do all household members ages 6-to-12 currently attend a school/educational institution?	A. No	0	
	B. No one 6-to-12	3	
	C. Yes	6	
3. In the past year, did any household member ever do work for which he/she was paid on a daily basis?	A. Yes	0	
	B. No	8	
4. How many rooms does your household occupy (excluding rooms used for business)?	A. One	0	
	B. Two	3	
	C. Three or more	5	
5. What is the main construction material of the walls of the main room?	A. Hemp/hay/bamboo, or other	0	
	B. Mud brick, or C.I. sheet/wood	2	
	C. Brick/cement	9	
6. Does the household own any televisions?	A. No	0	
	B. Yes	7	
7. How many fans does the household own?	A. None	0	
	B. One	4	
	C. Two or more	7	
8. How many mobile phones does the household own?	A. None	0	
	B. One	8	
	C. Two or more	15	
9. Does the household own any bicycles, motorcycle/scooters, or motor cars etc.?	A. No	0	
	B. Yes	4	
10. Does the household own (or rent/sharecrop/mortgage in or out) 51 or more decimals of cultivable agricultural land (excluding uncultivable land and dwelling-house/homestead land)?	A. No	0	
	B. Yes	7	

Microfinance Risk Management, L.L.C., microfinance.com   Score:

Annex 4- Bangladesh PPI®: Lookup Tables

The following lookup tables convert PPI scores to the poverty likelihoods below each of the poverty lines.

PPI Score	USAID Extreme (%)	$1.25 2005 PPP (%)	$1.75 2005 PPP (%)	$2.00 2005 PPP (%)	$2.50 2005 PPP (%)
0-4	65.8	97.9	98.8	100.0	100.0
5-9	65.6	89.3	98.2	98.7	99.7
10-14	57.2	88.8	98.2	98.7	99.7
15-19	42.5	81.6	96.9	98.6	99.7
20-24	32.7	78.0	96.3	98.4	99.7
25-29	22.9	65.8	91.6	95.3	98.7
30-34	16.9	57.0	87.9	93.5	98.2
35-39	13.8	50.3	83.6	90.7	96.9
40-44	11.1	40.8	79.6	87.4	94.9
45-49	5.4	33.5	68.8	79.6	91.5
50-54	4.5	24.2	60.3	74.2	87.9
55-59	1.8	14.5	50.4	65.2	84.3
60-64	1.0	10.9	40.4	54.6	73.2
65-69	0.1	8.7	32.2	44.5	63.3
70-74	0.0	5.6	31.5	42.9	60.4
75-79	0.0	4.3	25.8	34.0	50.7
80-84	0.0	2.7	19.7	26.7	40.9
85-89	0.0	0.0	10.7	14.6	33.3
90-94	0.0	0.0	5.1	6.6	12.3
95-100	0.0	0.0	0.0	0.0	0.0

Source: Microfinance Risk Management, L.L.C. Based on Bangladesh's 2010 HIES Survey.

Annex 5: Details of data collection and Management of Shomoshti

Data Collection and Management Overview[1]

Value Chain Node	Key Milestone	Indicator Coverage/ Monitoring Subject	Tracking Tools	Frequency	Sampling	Responsibility
Households (HH)	Outreach, income, nutrition, satisfaction, service access, empowerment, etc.,	Productivity, Farming practices, participation, Gender assets, mobility, decision making consumption, Relationships with other value chain actors, etc	Households Profile	Monthly/Quarterly	Project targeted all households producers (census)	PNGO staff
			Structured Questionnaire	Bi-annually	Sample survey (combination of old and new producers.)	CARE staff with volunteer
			FGD/GD checklist	Quarterly/Bi-annually	Targeted community	Staff
			Case study			CARE & PNGO
Group		Practice adaptation, group strength, technical skill, service access, practice, productivity, cost and income, etc	Group Mapping Template	Quarterly	Census	PNGO
			ePPT[2]	Based on value chain nature	Census	PNGO
			Activity tracking sheet	Monthly /Quarterly		PNGO
			Staff observation	Monthly		CARE and PNGO
			SCA & LSP Profile	Quarterly	Census	PNGO

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[1] It will be more dynamic combination of ICT, traditional, PM&E and having opportunity to adjust frequent changes
[2] Participatory Performance Tracker (PPT) and ePPT means Electronic Participatory Performance Tracker

Value Chain Node	Key Milestone	Indicator Coverage/ Monitoring Subject	Tracking Tools	Frequency	Sampling	Responsibility
Public and private providers		Income, customer, service delivery, ownership, etc., Types of services, Service mechanism, Systemic change	SCA and LSP performance tracking	Quarterly	Census	PNGO
			SCA and LSPs Capacity assessment	Bi-annually (Self-assessment)	Census	CARE and PNGO
			Meeting minutes	Monthly/quarterly		CARE+PNGO
			Event report	Monthly	Census	PNGO+CARE
			KII	Need base		
			Service mapping	Quarterly		
			Staff observation	Monthly		CARE and PNGO
Market price		Input-output market Price list	Calendar	Need base	Sampling	CARE+PNGO
			Market survey	Monthly/quarterly/need base	Sample	CARE+PNGO
Community			PPA process	Round the year (targeted community)	Census	PNGO
			WBA data tracking template	Round the year (targeted community)	Census	PNGO
			Social Accountability tools	Bi-annually	Sample	PNGO
			FGD/GD	Quarterly	Need base	CARE & PNGO

Annex 6: Staff Roles and Responsibilities on Results Measurement

Tasks/Outputs	Lead	Support	Reviewing (Quality Control)	Approving
Sector and intervention strategies				
Sector Strategy	Sector Specialist/Advisor	Intervention Manager (STM/TM/SPO) & Implementation Manager (RPM)	Agricultural Value Chain Coordinator	Senior Team Leader
Intervention Strategy	Intervention manager (STM/TM/SPO)	Implementation manager (RPM)	MRM Specialist WEE specialist	Sector Specialist/ Advisor
Overall MRM strategy	MRM Specialist	Intervention manager Sector Specialist/ Advisor	Project Implementation Unit	Senior Team Leader
Gender strategy	WEE specialist	Intervention Manager (STM/TM/SPO) Implementation Manager (RPM)	Project Implementation Unit	Senior Team Leader
Intervention Guide				
Business model	Intervention manager (STM/TM/SPO)	Implementation Manager (RPM)	MRM Specialist	Sector Specialist/ Advisor
Results chain	Intervention manager (STM/TM/SPO)	Implementation Manager (RPM)	MRM Specialist	Sector Specialist/ Advisor
Indicators	Intervention manager (STM/TM/SPO)	Implementation Manager (RPM)	MRM Specialist	Sector Specialist/ Advisor
Projection	Implementation Manager (RPM)	Intervention manager (STM/TM/SPO)	MRM Specialist	Sector Specialist/ Advisor
Overall MRM strategy and Attribution	MRM Specialist	Implementation Manager (RPM)	Sector Specialist/ Advisor	Senior Team Leader

		Intervention manager (STM/TM/SPO)		
MRM plan	MRM Specialist	Implementation Manager (RPM) Intervention manager (STM/TM/SPO)	Project Implementation Unit	Senior Team Leader
Systemic Change	Intervention manager (STM/TM/SPO)	Implementation Manager (RPM)	Project Implementation Unit	Senior Team Leader
Collection and documentation of regular monitoring data				
Data collection	Implementation Manager (RPM)	Intervention manager (STM/TM/SPO)	MRM specialist	-
Data analysis and documentation	Intervention manager (STM/TM/SPO)	Implementation Manager (RPM)	Sector Specialist/ Advisor MRM Specialist WEE Specialist	-
Research/survey design				
Outsourcing (procuring research firm)	MRM Specialist	Sector Specialist/ Advisor WEE Specialist	-	Senior Team Leader
Methodology	MRM Specialist	Intervention manager (STM/TM/SPO) Research firm	Sector Specialist/ Advisor WEE Specialist	Senior Team Leader
Questionnaire	Research firm	Intervention manager (STM/TM/SPO)	Sector Specialist/ Advisor WEE Specialist	MRM Specialist
Data gathering	Implementation Manager (RPM)	Intervention manager (STM/TM/SPO) Research firm	-	-
Quality Control (data entry + cleaning)	Research firm	Implementation Manager (RPM)	Intervention manager (STM/TM/SPO)	MRM Specialist

Data Analysis	Research firm	Intervention manager (STM/TM/SPO) Implementation Manager (RPM)	MRM Specialist	-
Interpretation and Summary on findings	Research firm Intervention manager (STM/TM/SPO)	Implementation Manager (RPM)	Sector Specialist/ Advisor MRM Specialist WEE Specialist	-
Aggregation/Reporting				
Aggregation	Intervention manager (STM/TM/SPO)	Implementation Manager (RPM)	Sector Specialist/ Advisor MRM Specialist WEE Specialist	Senior Team Leader
Reporting				
Quarterly regional report	Implementation Manager (RPM)	Intervention manager (STM/TM/SPO)	MRM Specialist	Sector Specialist/ Advisor
Intervention summary report	Intervention manager (STM/TM/SPO)	Implementation Manager (RPM)	MRM Specialist WEE specialist	Sector Specialist/ Advisor
Sectoral summary report	Sector Specialist/ Advisor	Intervention manager (STM/TM/SPO)	Project Implementation Unit	Sector Specialist/ Advisor MRM specialist
Project level reporting: APO & Semester, Annual and CS Monitoring Reports	MRM specialist	Sector Specialist/ Advisor	Project Implementation Unit	Senior Team Leader
Review Meeting				
Quarterly regional coordination meeting	Implementation Manager (RPM)	Program Officer	-	-
Quarterly intervention progress update	Intervention manager (STM/TM/SPO)	Implementation Manager (RPM)	MRM Specialist WEE Specialist	Sector Specialist/ Advisor

Quarterly project coordination meeting	Senior Team Leader	Project Implementation Unit	-	-
Six monthly intervention review meeting	Sector Specialist/ Advisor MRM specialist	Intervention Manager (STM/TM/SPO) Implementation Manager (RPM)	-	-
Annual portfolio review meeting	Sector Specialist/ Advisor MRM specialist	Intervention Manager (STM/TM/SPO) Implementation Manager (RPM)	-	-
Half-yearly project steering Meeting	Senior Team Leader	Sector Specialist/ Advisor MRM Specialist WEE Specialist	-	-