Results Measurement Manual

Promoting Rural Incomes through Support to Markets in Agriculture

February 2015

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

ANNEXES:

Annex 1: Complying with the DCED Standard
Annex 2: Intervention steering document
Annex 3: Research design template
Annex 4: Description of qualitative methods that might be used
Annex 5: Common generic indicators
Annex 6: Roles and responsibilities

Table 1: List of abbreviations

AIP	Australia-Indonesia Partnership
PRISMA	Promoting Rural Incomes through Support for Markets in Agriculture
AS&PR	Annual Sector & Portfolio Review
BAC	Before After Comparison
BACO	Before After Comparison with Opinion
BEE	Business Enabling Environment
CG	Comparison Group
CMT	Core Management Team
DCED	Donor Committee for Enterprise Development
DFAT	Department of Foreign Affairs and Trade
DiD	Difference in Difference
DTL	Deputy Team Leader
FGD	Focus Group Discussion
GoA	Government of Australia
GoI	Government of Indonesia
GSD	Growth Strategy Document
GSI	Gender and Social Inclusion
HBEE	Head of BEE
HoSP	Head of Sector Portfolio
HRM/L	Head of Results Measurement and Learning
IDR	Indonesian Rupiah
IP	Intervention Plan
ISD	Intervention Steering Document
ISP	Intermediary Service Provider
KBI	Key Business Indicator
KPI	Key Performance Indicator
M4P	Making Markets Work for the Poor
MP3KI	Master Plan for Acceleration and Expansion of Poverty Alleviation in Indonesia
MR	Monthly Review
MRM	Monitoring and Results Measurement
NGO	Non-Government Organisation
NTB	Nusa Tenggara Barat
NTT	Nusa Tenggara Timur
PPI	Progress out of Poverty Indicators
PPP	Purchasing Power Parity
QED	Quasi Experimental Design
QR	Quarterly Review
RM	Results Measurement
SP	Service Provider
SR	Semi-annual Review
TL	Team Leader

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Major revisions will be in whole numbers. E.g. 1.0

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EXECUTIVE SUMMARY

This document fulfils the requirements of Clause 16.12 of Schedule 1 of contract number 65795 between the Department of Foreign Affairs and Trade (DFAT) and GRM International, which is the managing contractor for Australia-Indonesia Partnership - Promoting Rural Incomes through Support to Markets in Agriculture (AIP-PRISMA).

The document starts, in Chapter 1, with the background to PRISMA, explaining the goal of the overall AIP-Rural program and how PRISMA fits into that overall goal. It then explains why this manual is necessary. Part of the reason is of course because PRISMA subscribes to the Standard on results measurement set by the Donor Committee on Enterprise Development. However, it is also because a good results measurement system is essential for getting robust results and for steering the program at all levels towards successful achievement of its goals. Chapter 1 also sets out what can and cannot be expected from the manual.

The backbone of the results measurement system is composed of the program results chain and the program review cycle. The program results chain explains the generic kinds of changes that the program expects to see occurring due to its work and how those changes will create other changes which will ultimately lead to increased incomes for poor farm households. However, just working out a sequence of changes does not mean that those changes will happen. Being able to create the changes envisioned requires careful selection of the right commodities, sub-sectors and interventions, as well as reviewing progress and making informed management decisions. As a result, the program selection and review cycle forms the second critical component of the results measurement system. PRISMA has thus developed a process which requires careful analysis and which drills down from commodities to sub-sectors to identification of the real problems or opportunities in a sub-sector, and then develops interventions to address them. Interventions are designed so that they contribute to the broader goal of pro-poor systemic change in the sub-sector. Once interventions are chosen, PRISMA must continuously follow up intervention activities, and make decisions to ensure that activities happen, create the right changes and have the desired effect of raising incomes. This follow-up happens through a set of reviews done at different times (monthly, quarterly, semi-annually and annually) to assess how interventions work, how sub-sectors are changing, and ultimately what that means for the program portfolio. Chapter 2 of this manual describes this process, thus providing an overview of the system.

A good review needs to be supported by clear and concise information about what is happening in reality. The identification of the key information is guided by the development of a results chain for each individual intervention. This results chain development implies that the right indicators for the results chain are developed and projected; the identification of the right indicators implies that those indicators must be measured in an attributable manner and the findings of the measurements must then be used to review interventions, and their contribution to sub-sector goals. Thus the results measurement process comes full circle. The selection of attributable methods of measuring results requires that the program considers external influencing factors and is able to establish a counterfactual of what would have happened without the intervention. This whole process is described in Chapter 3. Chapter 4 is dedicated to methods of measurement.

The results measurement system must be able to aggregate results across different interventions and sub-sectors both to guide decisions on program portfolio and to report aggregate program progress. Aggregation methods must take into account degrees of overlap among interventions to avoid double counting; how to do this is explained in Chapter 5. The results measurement system also needs to do a bit more than just measure changes which result from an intervention. It should also help keep track of how the interventions create systemic changes and the implications for the program portfolio. Definitions of systemic change tend to vary and this means the program must define its initial assumptions of the pathways to systemic change, measure those and look out for other pathways. Part of this may be done by projecting and measuring copying and crowding in, but the program must also keep an eye out for other ways in which systemic change can happen. The

program's current plan for achieving systemic change is explained in Chapter 6. The results measurement system must also ensure that cross-cutting issues (such as gender, social inclusion, environment and food security) are integrated into interventions and are measured. As a minimum, the program has a do-no-harm policy with regards to all these issues, and where possible will aim to do more; this is explained in Chapter 7. Finally, it is important to mention here that a results measurement system must be driven by those who implement interventions; their roles and responsibilities are also described in this manual in Chapter 8. A significant part of the responsibility for carrying out results measurement falls on the implementation team, while a significant part of the responsibility for carrying out results measurement robustly and accurately falls on the results measurement team. Good and useful results measurement for the program is thus only possible with both teams working together while carrying out the roles set out for them in this manual.

The program aims to carry out an audit of its results measurement system. As a first step, it aims to put the results measurement system in use and then have a pre-audit review in 2015. This will inform the program how well it complies with the Standard and how ready it is for a full audit. The aim is to have a full audit done by end of 2016, if not before. This manual will also need to be updated and changes to it should be made by the results measurement team.

1. INTRODUCTION

1.1.   BACKGROUND TO PRISMA

Despite considerable progress in fighting poverty in Indonesia over the last ten years, there is still much work to be done to achieve equitable and inclusive economic growth. Under the Australia-Indonesia Partnership (AIP), both governments share a goal of increasing growth in rural incomes in Indonesia, including in the less developed areas of eastern Indonesia. As a result, the governments of Australia (GoA) and Indonesia (GoI) developed the Australia-Indonesia Partnership for Rural Economic Development Program (AIP-Rural). AIP-Rural is designed as a 10-year program ending in June 2022. The program works in five provinces in eastern Indonesia: East Java, Nusa Tenggara Timur (NTT), Nusa Tenggara Barat (NTB), Papua and West Papua. The focus of AIP-Rural is to increase smallholder farmer incomes and competitiveness in a market-oriented manner through sustainable solutions. The rationale for support for agriculture in Indonesia is that the sector is typically estimated to be up to three times more efficient in reducing poverty compared to other major economic sectors in developing economies. Agriculture provides livelihoods for millions of workers in Indonesia, particularly in rural areas, and underpins food security and nutrition.

AIP-Rural's goal is to contribute to a 30 percent or more increase in net income for 1,000,000 smallholder rural female and male farmers, 300,000 of whom will be reached by December 2018. AIP-Rural consists of five distinct but complementary funding streams:

a. The largest is PRISMA, which commenced in November 2013.

b. Tertiary Irrigation Technical Assistance (TIRTA) – a program which is designed to boost agricultural productivity through improving farmer access to water.

c. A financial inclusion program which will address value chain finance.

d. Applied Research and Innovation System in Agriculture (ARISA) – an agricultural research and innovation program designed to improve farmer access to new processes and technologies.

e. Advanced start-up activities managed directly by DFAT to develop local capacity in agricultural value chain promotion and market development.

Whereas PRISMA shares the same **"Goal"** and quantitative target as AIP-Rural (an increase in farmer incomes), the "**Objective" of PRISMA** is more specific: to increase competitiveness of poor female and male farmers. The competitiveness of farmers is influenced by access to effective public and private services, as well as the wider policy, infrastructure and regulatory environment.

PRISMA's outcomes: To achieve improved competitiveness of poor farmers[1], the program focuses on three key outcome areas:

• Outcome 1: Farmers apply improved farm practice

• Outcome 2: Farmers utilise improved access to inputs and output markets

• Outcome 3: Improved business enabling environment is achieved at sub-national level.

Outcomes 1 and 2 will lead to farmers having better access to inputs, services and markets to improve their farm practices and performance, resulting in more efficiency and more production, hence creating more income for the farmers. Developing new products, substituting imports,

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[1] Here and throughout the rest of this document, 'poor farmers' means poor 'farm households.' The definition of 'poor' is given in section 3.11.

prolonging the production period and increasing exports are the main areas to address. PRISMA will engage with private sector partners and assist them to develop their capacity to establish and develop linkages with local enterprises and service providers who will then provide those services and products to the farmers. Examples are the support to seed suppliers to improve their distribution channel, by expanding their number of retailers and assisting them to provide advice to farmers.

Outcome 3 will address the business enabling environment at the subnational level, by assisting private and public partners to take action to improve the business environment for the selected sub-sectors. The results of these initiatives will affect the private sector partners and their service providers, and result in better services, inputs and markets for the poor farmers. Examples are the support to local governments to change business regulations affecting the private sector partners, the local service providers and improve efficiency and growth of the sub-sectors, or the support to private sector partners to lobby the government to remove hindrances in the sub-sector.

1.2.   PURPOSE OF THIS MANUAL

To maintain the coherence of the five separate AIP-Rural programs, each will use the same results measurement system, based on the "Donor Committee for Enterprise Development Results Measurement Standard" (Standard). The Standard sets out the minimum requirements of any results measurement system needs to provide credible evidence of program achievements. Such a system is also designed to provide "real time" feedback loops to management on impact, outreach, and value for money and causal links. Results measurement starts from the very beginning of a program when markets are being studied and intervention ideas are being developed; it continues after intervention activities begin, becoming more rigorous and a regular occurrence, and finally concludes at the end of the intervention monitoring period (see below, Chapter 2.1.1).

This manual outlines how the results measurement system of PRISMA will work, but is not a step-by-step set of instructions. It rather gives the broad outlines of the results measurement process within the framework of key aspects of management of the program (e.g. developing results chains, defining indicators, using the system for reviews). The manual assumes a basic familiarity with the requirements of the DCED Standard and the M4P approach, and thus does not give any introduction or explanation of these concepts. It is intended to guide program staff involved in the design, execution and assessment of interventions; it is also designed in such a way that program staff can turn to a specific chapter explaining the particular results measurement concept they are working on for guidelines and explanations.

This manual is not a static document. As the needs of the program change, its results measurement system will need to evolve, and as the system evolves, so will this document. This version of the manual is based on version VI of the DCED Standard and therefore may also need updating based on any new versions of the Standard. In addition, it does not deal with every exception and eventuality; it aims to explain the application of the basic concepts of regular results measurement. Where exceptions occur, as they most certainly will, they will be handled on a case-by-case basis.

2. THE PRISMA MEASUREMENT SYSTEM

2.1. THE PROGRAM RESULTS CHAIN

As the first step in the development of a results measurement system, PRISMA has developed its own theory of change, reflected in the PRISMA program results chain below (Figure 1). The program logic is to support the public and private sector actors (Activity level), which leads to change in capacity and behaviour of the partner (Partner outcome level). Then the partner is able to build the capacity and behaviour of the service providers (Service provider output level), who will then provide better or more services/products to the farmers (Service provider outcome level). The farmers will receive and apply those services/products (Farmer outcome level), leading to more competitive farmers (Farmer competitiveness level) and increased income (Goal level). PRISMA focus will be on scale and sustainability.

2.1.1. MEASURING PERIOD

PRISMA will assess changes within the framework of the results chain given below. Results reported will only be those which have been measured and attributed to the program. Measurement and reporting of results will be fixed within a specific time frame. *The starting point of measurement will be when the intervention activities start.* The claiming period will be for two years after PRISMA's activities under that intervention ends. The total number of farmers benefited and the total net additional attributable income for these two years will be claimed. Changes in income and outreach are likely to continue to happen after that period but will not be claimed as impact by the program (claiming after two years is likely to provide too many challenges in terms of establishing the counterfactual; moreover at that point the change is likely to become part of the regular workings of the sub-sector and will start to be influenced by other factors). There may be exceptions to this rule; for example some interventions may take more than two years after activities end to show any benefits. How to measure such cases should be discussed and decided between RML team, intervention team and the deputy team leader.

Systemic changes are likely to happen much later and can occur in many different ways, and the program will be sure to try and track signs of how systemic changes happen. A commonly accepted sign of systemic change is when copying and crowding-in occur (see Chapter 6 for definitions of copying and crowding-in). The program will therefore look for signs of copying and crowding-in happening, and claiming the respective effects will be done in the same manner as described above.

The starting point for copying will be the "point of time when copying starts"; the claiming period will then be for two years after that point: the total number of copying farmers and their total net additional attributable income for two years after copying takes place will be claimed and measured.

The starting point for crowding-in will be the "point of time when crowding-in takes place"; the claiming period will then be for two years: the total number of farmers who benefit from firms which have copied the partner's business model and the farmers total net additional attributable income for two years after crowding-in takes place will be claimed and measured.

Goal/impact

Farmers increase net additional incomes

Farmers increase productivity and production

Farmer
competitiveness

Farmer outcome

Farmers receive advice and apply good practices

Farmers get and use appropriate inputs

Farmers are able to and access attractive markets

Service provider
outcome

SP provide appropriate advice to farmers

SP provide appropriate inputs to farmers

SP link farmers to attractive markets

Service provider
output

SP able and interested to provide appropriate advice

SP able and interested to provide appropriate inputs

SP able and interested to link farmers to attractive markets

Partner outcome

Partners are able to and so provide appropriate advice

Partners are able to and so provide appropriate inputs

Partners are able to and so link farmers to attractive markets

Partners action Business Enabling improvements

Better business enabling environment

Activity

Prisma supports Partners to invest and develop innovations

Prisma supports Partners to invest and develop innovations

Prisma supports Partners to invest and develop innovations

Prisma supports Partners to improve the business enabling environment

Figure 1: PRISMA program results chain

2.2. PORTFOLIO MANAGEMENT AND RESULTS MEASUREMENT

For PRISMA, portfolio management and results measurement are integrated into one program management system which can be seen in Figure 2. The system is based on a learning cycle to ensure that results measured are used to improve project implementation and portfolio management. In addition, the system will be able to generate credible results which PRISMA can use to report accomplishments to date.

The process starts with the analysis of the commodities which PRISMA will focus on. During the program life cycle, portfolio review meetings will inform management whether to add or drop sub-sectors of different commodities. How these steps are taken is shown in the diagram below, which is followed by an explanation:

Figure 2: PRISMA portfolio management and results measurement process

2.2.1. COMMODITY ANALYSIS

PRISMA's mandate is to reduce poverty and to do so in ways which are both sustainable and scalable. The selection of appropriate commodities is therefore crucial to ensure the feasibility of developing poverty reduction strategies. PRIS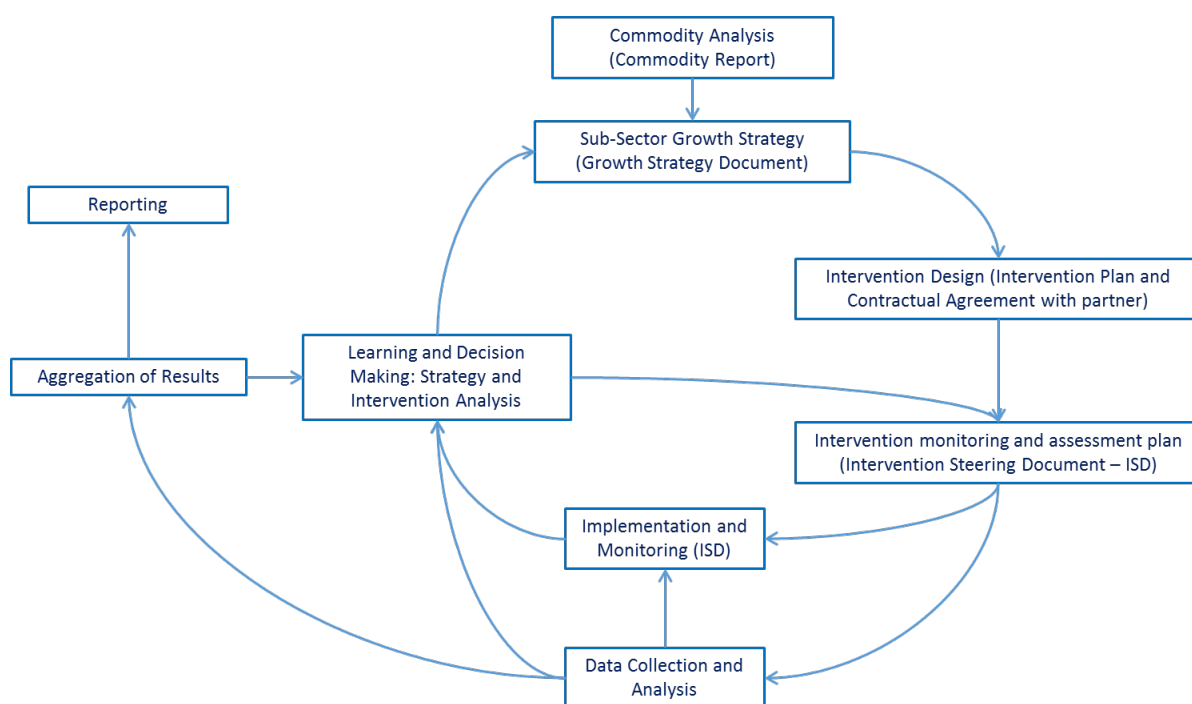MA uses the following four guiding principles to ensure that the right commodities are being selected from the outset. A commodity will be chosen when it falls at the intersection of all four criteria:

1. **Relevance to the poor**: commodities with high poverty incidence and high relevance for the poor. Since the majority of the world's poor are involved in some form of agriculture, agricultural commodities get precedence in the selection of commodities.

2. **Pro-poor growth potential**. There is considerable evidence to suggest that growth and poverty reduction must go hand-in-hand. Therefore for people in selected commodities to come out of poverty, there has to be significant potential for those commodities to grow. This growth may be reflected in either demand that is growing or has the potential to grow.

3. **Scope for intervention**. There has to be potential for partnering with the private sector, and/or alignment with government priorities, approaches and means, and a clear view of how to achieve systemic change (vision). The scope of intervention must also be pro-poor.

4. **Value for money**. There should be significant potential to reach impact and outreach in relation to the costs which might be spent on the commodity for intervention. It will not be possible at this stage to give numeric assessment of value for money but a subjective judgement must be made on whether working with a particular commodity represents good value for money.

Figure 3: Guiding principles for selection of sectors

At the beginning of PRISMA this analysis was documented in the form of a commodity report; 17 such reports were created for different commodities. Going forward however, PRISMA may decide not to create such reports but will move directly to analysis and development of a sub-sector growth strategy. Should that be the case PRISMA will ensure that the four principles outlined above are also reflected in the sub-sector analysis and growth strategy.

2.2.2. SUB-SECTOR ANALYSIS AND GROWTH STRATEGY

Once the appropriate commodities are analysed, the next step is to analyse the commodities in specific geographical locations e.g. beef in NTT province. In PRISMA, this combination of commodity and province is called a "sub-sector". The analysis of the sub-sector will include an analysis of local context and market dynamics and presented in the form of sub-sector maps, supporting functions, rules, regulations and policy environment of these specific sub-sectors. The problem and underlying causes are analysed. Intervention areas are identified and intervention concepts developed. The overall strategy is depicted in the sub-sector logic. This sub-sector logic represents the causal links

between intervention areas, changes in the market system and the improvement in the farmers' performances and incomes, and how different intervention ideas are fitted together to deliver intended impacts. Intervention concept notes are written and are an integral part of the Growth Strategy Document (GSD) for the sub-sector.

2.2.3. INTERVENTION DESIGN

Intervention concepts developed at the sub-sector analysis stage are then reviewed by a panel consisting of the management team. This panel takes a decision on which interventions have the potential to be taken forward to implementation. For selected interventions, an Intervention Plan (IP) is developed. The IP builds on the intervention concept developed and selected in the sub-sector growth strategy and develops the concept into a concrete plan. Potential partners are identified and the business model is strengthened by carefully considering the incentives of the different stakeholders. The activities of the intervention are designed and a draft results chain is developed to lay out the causal pathway of change. Projections of outreach and potential budgets are prepared (based on projections) to show the potential returns on the investment. With the details of the intervention chalked out, contact is established with private sector partners. The business models are discussed and cost-sharing agreements are reached. This is then reflected in the contractual agreement between PRISMA and the partner, and implementation of the intervention starts.

2.2.4. INTERVENTION MONITORING AND ASSESSMENT PLAN

Once the intervention is approved and deals have been signed with the partner(s), the next step is to develop the Intervention Steering Document (ISD). The ISD is a living document which will be used to steer the project implementation as well as the result measurement activities, and will be reviewed and updated quarterly. The ISD should be able to provide a glimpse of how the intervention is progressing towards its goals of increased incomes for poor farmers. By doing this it can stimulate discussion around what works, what does not work and what needs to change. Any changes made to the intervention and reasons for these changes will be recorded in the ISD, thus providing a track of what has been done and why in the intervention.

2.2.5. IMPLEMENTATION AND MONITORING

During the implementation, it is important to monitor the implementation of the activities carried out by both PRISMA and the partners to ensure that the activities agreed are undertaken within the planned timeline.

To monitor the activities and results of those activities, both quantitative and qualitative information is collected and analysed. This will help assess the progress of projection implementation, and the behaviour and capacities of the players in the sub-sector. Through the on-going regular feedback loop, PRISMA will learn and adjust the implementation on a timely basis.

2.2.6. DATA COLLECTION AND ANALYSIS

During implementation, PRISMA will carry out the data collection as detailed in the "MRM Plan" of the ISD. Both quantitative and qualitative indicators will be gathered to assess:

- Have changes happened or not happened?
- To what extent?
- How has the change happened?
- Why changes have happened or not happened?
- Are changes likely to be sustainable?

Collected results will be processed and analysed, and are the input for the review process of the intervention, and subsequently of the sub-sector growth strategies and the PRISMA portfolio.

One of the key functions' of the system is to provide a feedback mechanism to managers to facilitate the learning and improvement of program implementation and portfolio management. PRISMA operates in a dynamic complex system and it is very important that a continuous learning mechanism is in place. Interventions are unlikely to work out as perfectly as planned. Since the system is complex and dynamic, PRISMA has to constantly try out interventions and continuously adjust and improve their implementation. In addition, PRISMA also needs to periodically review the performance of its sub-sectors and portfolio, decide whether it is likely to achieve the overall program intended impacts and adjust accordingly.

Although there will be ongoing communication and decisions made on a day-to-day basis, PRISMA will also have formal reviews scheduled to review progress, identify lessons learned and take action to improve project implementation. To address different aspects of the program, four types of review meeting are formally scheduled on a regular basis. The reviews are listed below; details of what will be discussed and who will be involved are given in Chapter 3.7

- Monthly Review (MR): This is generally done for sub-sectors that are being implemented by the co-facilitators. The monthly meeting will focus on progress of intervention activities, whether they are on track, why or why not? Are they likely to trigger subsequent changes? Have there been any changes to the partners or ISPs which will affect the implementation of activities? What may be needed to be modified in the activity plan to improve the effectiveness of activities? The activity plan will then be adjusted accordingly.

- Quarterly Review (QR): The quarterly review meeting will focus on the intervention logic and verify whether the progress of the intervention is still aligned with its projected reach and its goal of market system change. This should spur on the discussion around what worked or did not work, why, what lessons have been learned and what (if anything) needs to be adjusted. During the quarterly reviews, all ISD worksheets (such as results chains, measurement plan and projections) will be reviewed and revised accordingly.

- Semi-annual review (SR): The semi-annual review meeting will focus on the overall performance of interventions and effects on the sub-sector. What are the key changes the sub-sectors? How will interventions affect sub-sector growth strategies and interventions? Are the sub-sector growth strategies still valid? What worked or did not work and why? What are the lessons learned?

- Annual Sub-sector and Portfolio Review (AS&PR): The annual sub-sector and portfolio review will start with the review of all sub-sector performances, as in the semi-annual review meeting. In addition, the overall performance of PRISMA will be reviewed. With the current portfolio of sub-sector and interventions, will PRISMA achieve the overall program targets? What are the key lessons learned which could be applied across the portfolio? What needs to change? The portfolio and annual plan are then adjusted accordingly.

The table below reflects who must be involved in each review:

Table 2: Summary of review meetings and participants

Month no.	Who participates	Which review
M1	IC, SC, SM	MR
M2	IC, SC, SM	MR
M3	IC, SC, SM, RMC	QR
M4	IC, SC, SM	MR
M5	IC, SC, SM	MR
M6	IC, SC, SM, RMC, RMM And either HoSP, HBEE, HRM/L, or DTL	SR

M7	IC, SC, SM	MR
M8	IC, SC, SM	MR
M9	IC, SC, SM, RMC	QR
M10	IC, SC, SM	MR
M11	IC, SC, SM	MR
M12	IC, SC, SM, BM, RMC, RMM And either HoSP, HBEE, HRM/L, or DTL	AS&PR

BM: BEE Manager, **DTL**: Deputy Team Leader, **HBEE**: Head of BEE, **HoSP**: Head of Sector Portfolio, **HRM/L**: Head of Results Measurement and Learning, **IC**: Intervention Coordinator, **RMC**: Results Measurement Coordinator, **RMM**: Results Measurement Manager, **SC**: Sector Coordinator, **SM**: Sector Manager

2.2.8. AGGREGATION

The PRISMA portfolio and result measurement system must be able to aggregate results at the program level. This is important not only for reporting purposes, but also to track the cumulative impact of the program against its overall goal. PRISMA's goal is to have a 30 percent increase in incomes for more than 1,000,000 male and female smallholder farmers by 2022; 300,000 of this will be reached by end 2018. In order to monitor the progress towards this goal, it is important to have a system in place which is able to aggregate (add up) the results over time, while making sure that there are no overlaps (double counting).

Not all indicators can be aggregated; for example it makes no sense to aggregate productivity from a number of different interventions in different sub-sectors. PRISMA has identified a number of indicators which can be aggregated across all interventions and sub-sectors. These indicators have also been chosen because they can also be used to demonstrate progress of the program towards the ultimate goal. These are the Key Performance Indicators (KPIs) and are listed in the table below. It is important to note here that the KPIs are not targets and should not be assumed to be so; they are simply an indication of potential change in the sub-sectors.

Table 3: PRISMA Key Performance Indicators

Key Performance Indicators	Definition	RC levels
1 Number of poor farm households who increase their income due to PRISMA interventions	Total number of farmers who have achieved a financial benefit, corrected for overlaps, per year and cumulative to date	Impact
2 Net additional attributable income for targeted poor farm households	Net additional attributable income (additional sales minus additional costs) in IDR, per year and cumulative to date	Impact
3 Number of service providers that increase their additional turnover due to PRISMA interventions	Total number of service provider that have achieved an attributable increase in turnover, corrected for overlaps, per year and cumulative to date	Service provider outcome
4 Net additional attributable turnover for service providers due to PRISMA interventions	Total net additional attributable turnover (additional sales) in IDR, per year and cumulative to date	Service provider outcome
5 Number of innovations	Total number of innovations per year and cumulative,	Partner

introduced by private sector partners	defined as 'new' in the sub-sector in terms of technology, product or business model	outcome
6 Number of initiatives by public and private sector actors to improve the Business Enabling Environment	Total number of initiatives per year and cumulative, defined as activities of partners which are supported by PRISMA (for which an intervention plan is written and implemented) and that lead to income changes for farmers	Partner outcome
7 Number of private and public sector actors	Total number of private and public partners, per year and cumulative	Activity
8 Investment value by public and private sector actors	Total value of investment by partners and service providers, per year and cumulative, in IDR, defined as net additional capital employed (investment and working capital)	Partner/service provider outcome

PRISMA may also measure and use for internal portfolio management a number of Key Business Indicators (given in table below). These indicators will however only be measured where possible and where it makes sense to do so. However value for money will only be reported using the KBIs of return on investment and per farmer investment.

Table 4: PRISMA Key Business Indicators

Key Business Indicator	Definition per intervention	Aggregated for PRISMA
1. **Contribution of PRISMA**	The investment grant defined in the contractual agreement with the partner, excluding operational and overhead costs of PRISMA per intervention	Total contribution, per year and cumulative, in IDR
2. **Contribution of private sector partners**	The investment (working capital and investments) defined in the contractual agreement with PRISMA per intervention	The total contribution, per year and cumulative, in IDR
3. **Contribution of public sector partners**	The investment (working capital and investments) defined in the contractual agreement with PRISMA per intervention	Total contribution, per year and cumulative, in IDR
4. **Contribution of service providers**	The investment (working capital and investments) defined in the contractual agreement with PRISMA per intervention	Total contribution, per year and cumulative, in IDR
5. **Leverage ratio**	The total contribution of private partners (KBI 2) or public partners (KBI 3) divided by the contribution of PRISMA (KBI 1)	Total of KBI 2 and KBI 3, divided by total PRISMA contribution
6. **Return on investment**	The net additional attributable income (KPI 2) divided by PRISMA costs	Net additional attributable income (KPI 2), divided by total PRISMA costs (including operational and overhead

		costs)
7. Per farmer investment	The costs incurred by PRISMA (KBI 1) divided by the total number of farmers (KPI 1)	Total PRISMA costs (including operational and overhead costs), divided by number of farmers (KPI 1)

The above KPIs and KBIs help management monitor progress and are recorded in the ISD worksheets "background" and "key indicators".

2.2.9. REPORTING

PRISMA will report measured and attributable progress made by the program every six months. These semester reports to DFAT will report progress and projections based on the KPIs mentioned above. Thus the program will use the KPIs to illustrate its projected change, cumulative change till date, and changes achieved over the last six months. Qualitative information will be used to explain the reasons behind changes in the KPIs and what these changes mean for the future of the program.

Reports to DFAT will be submitted twice every year in February and August; the review cycle of the program has been timed fit in with the reporting cycle. The SRs will take place in December and the AS&PR will take place in June every year. This ensures that reports to DFAT are as up-to-date as possible and reflect major management decisions made in the program.

3. METHODS AND APPROACHES FOR MEASUREMENT

Measuring impact for each of the interventions needs to be carefully planned. The results measurement system, in order to be able to measure and report credible impact, implies the following steps:

1. Develop sufficiently detailed and logic **intervention results chains**

2. **Define indicators** which enable you to measure changes along the results chain

3. Make a **projection** of the expected changes based upon key quantitative indicators

4. Define **attribution strategy** and **overall measurement plan**

5. **Establish baselines**

6. **Monitor** and **measure** attributable changes due to the intervention

7. **Analyse**, **learn**, and **use results**

8. **Record and report**

This chapter describes each of these steps.

3.1. INTERVENTION RESULTS CHAIN

Because PRISMA works with market players to introduce innovative business models, there are many steps between PRISMA activities and impact on smallholder farmers; there are also many 'intermediate results' between them. PRISMA therefore needs a tool to track the changes along the chain of different market actors to where they impact on farmers. Mapping out this series of changes is done in a **results chain**.

The intervention results chain is a visual tool which shows how activities will lead to partner outcome, service provider output and outcome, farmer outcome, famer competitiveness and eventually farmer impact. The results chain will form the backbone of the PRISMA result measurement system. All other elements i.e. indicators, measurement plan and reviews will follow the structure of the intervention result chain articulated.

The process of developing the intervention result chain will clarify the thinking and underlying logic of the interventions, as well as the key assumptions that need to hold true. The intervention results chain has to be arranged in a **logical order**. It represents the causal relationship between one change and the next, thus helping to identify critical tasks needed for a change to happen.

Well-articulated results chains will help PRISMA to deal with **attribution** challenges. If the changes happen along the logical and sufficiently detailed result chains, and changes in one level are caused by the changes in the previous level, PRISMA can demonstrate that its activities contribute to the smallholder farmer impacts. The additional step remaining is to isolate the impacts of other external factors on observed total changes.

The intervention results chains have to be **sufficiently detailed** in order to help PRISMA identify where the broken links are in the chain. If there is a gap (missing information) between two levels of a results chain, PRISMA might not be able to identify where the problems are and might not be able to solve them. For example, if the results chain jumps from the level "service providers provide the services" to "farmers increase yields", then if yields do not increase, PRISMA might not be able to identify why not. It could be that the farmers did not want to use the services or they did not use them properly, or simply that the yields were influenced by the weather. If there are gaps, it may be difficult to assess attribution.

PRISMA intervention result chains should follow the logic of the overall program results chains (outlined in Chapter 1) by starting with activities, followed by intended partner outcomes, service provider outputs and outcomes, farmer outcomes, famer competitiveness and eventually farmer impacts. However, in each level there is often more than one change ("boxes"). There is no rule on how many boxes there should be: the rules are that a) there must be as many boxes as necessary, and b) the arrows have to represent the causal link between result chain boxes. The following table summarises the typical changes to each level of the PRISM overall program results chain.

Table 5: Typical changes in each level of the PRISMA overall program result chain

Level	Typical changes
Farmer impact	• Smallholder farmers increase net attributable additional income
Farmer competitiveness	• Smallholder farmers increase sales revenue • Smallholder farmers reduce costs • Smallholder farmers sell products or services at a premium price • Smallholder farmers increase productivity • Smallholder farmers increase production capacity
Farmer outcome	• Smallholder farmers apply new or improved practices or utilise new or improved inputs, or establish contracts with new buyers • Changes in capacities and/or incentives of smallholder farmers related to received services or inputs or markets • Smallholder farmer receive new or improved services or inputs
Service provider outcome	• Service providers provide new or improved services or inputs related to new business model to farmers • Service providers get money for providing the services/products to farmers thus have an incentive to continue.
Service provider output	• Changes in capacities and/or incentives of service providers related to implementation of new business model
Partner outcome	• Partners provide support to service providers to implement the new business model • Changes in the capacity and/or incentive of partners to support service providers • Partners get an incentive for developing capacity of service providers to support farmers.
Activities	• Activities implemented by PRISMA to support partners

The following are additional tips for making result chains:

o Be clear on the intervention logic and make sure that the results chain represents the business model introduced.
o Be specific and clear: mention who does what, and use active voice.
o Avoid using jargon e.g. capacitate, facilitate, support, and be as clear as possible.
o Ensure logic: make sure that if the arrow goes from one box to another the first box is a "**cause**" of the following boxes.
o Start with as many boxes as necessary. Then remove the boxes which are repetitive. However, make sure that the results chains are **sufficiently detailed**. If something could go wrong between two boxes, you should add another box to monitor that step.
o The results chain should be self-explanatory. External persons should be able to understand the result chain with little additional explanation.

In addition, each result chain box should include the following information:

o   Result chain box number
o   Projected value of key quantitative indicators to expected date (in italics font)
o   Achieved value to date (in normal and bold font)

The results chains are documented in the result chain sheet in the Intervention Steering Document (see Annex 2 for an overview of ISD). The result chain will be reviewed quarterly during the quarterly review meetings and will also be revised earlier if required.

3.2.   DEFINE INDICATORS OF CHANGES

After articulating the intervention results chain, the next step is to identify indicators to measure changes in each results chain box. For each box there should be one or more indicators to specify expected changes which need to be measured. Generally, good indicators should be:

• Specific: indicators must be clearly defined and specific to the changes described.
• Measurable: indicators must be measurable, either quantitatively or qualitatively.
• Relevant: indicators must be relevant to the changes in the result chain box.
• Time-bound: Time-related indicators must be identified along with a specific timeframe e.g. "kg of produce per ha per annum".

Both quantitative and qualitative indicators are needed to cover all aspects of change in an intervention. Quantitative indicators are required to measure 'to what extent' changes are happening. Qualitative indicators are useful to explore the nature of the changes: how and why, or why not, are changes taking place and will the changes be sustainable. Indicators should be developed carefully, taking care to mention where necessary which indicators will be gender disaggregated and which ones will not. Annex 5 has a list of some common generic indicators which may be used for each level of the results chain.

3.3.   PROJECTIONS

Projections are made from when a commodity is selected to when an intervention idea is converted to a concrete plan. Making projections for interventions means we try to predict how much change will occur in the sub-sector as a result of our interventions. The ultimate aim of projections is to be able to predict how many poor farmers will be reached through our interventions and how much income increase they will have. As much as possible, projections should be based on 'facts' and 'assumptions', and are thus derived through calculations which are thought through carefully.

Projections made in the IP and in the ISD predict the impact of a specific intervention and can be used to compare the expected impact with the costs of that intervention. However, when making projections for the IP not all details are known; more specifically, the extent of the activities which will be carried out is not clear (e.g. how many people will be trained, how many demo plots will be developed). That level of detail is available after a deal has been signed with the partner. It is at that point that detailed projections are made based on the intervention results chain.

3.3.1.   HOW TO MAKE PROJECTIONS?

Projections in the ISD are made based on a combination of inputs. These include:

1. Experience and knowledge of the staff

2. Data from primary research, such as field trials, case studies and opinions of stakeholders

3. Data from secondary research, such as commodity studies, sub-sector studies, market surveys and case studies

The projections should be made for a few select key quantitative indicators; they should say how much the value of the indicator would change due to the intervention.

Calculations for projections should be realistic, and in case of doubt, should be conservative. Many assumptions will be made and these should be recorded next to the cell with the projected value. The source of information should also be referenced. Projections are recorded in the "projections and results" worksheet of the ISD.

This (detailed) projection is used to track the intervention during implementation. As part of the quarterly review, the projections should be compared to the actuals and teams should discuss why projections vary from actuals. This can then help the teams understand what this means for the sub-sector and the portfolio.

The development of projections is led by the Sector Coordinator, supported by the Intervention Coordinator and the RM Coordinator. Changes in projections and actual numbers should always be approved by the RM Coordinator.

3.3.2. TIPS:

- Work bottom up, box by box
- Use actual numbers, not percentages
- Use additional attributable changes, not total changes
- Make sure that the cumulative results are recorded
- Be conservative:
  - o Don't assume all SPs will provide all services, or that all farmers will apply the service correctly: adjust the 'ideal' change with a conservative estimation.
  - o Don't assume all farmers will increase their yields in the way it was done during a demonstration or pilot; some will not apply inputs properly and get a lower than possible yield.
  - o Do the projections before you make the measurement plan. It helps you to think through the intervention logic and plan. If it is difficult to make the projections, it might be that you don't know enough yet, or that indicators are missing or need to be adjusted. It also helps you to make the measurement plan.

3.4. ATTRIBUTION AND OVERALL MEASUREMENT PLAN

The "Overall MRM Strategy" worksheet in the ISD needs to address:

- Whether or not universal indicators will measured
- The likelihood of overlaps between interventions
- The likelihood of displacement, and how it will be dealt with
- Which attribution method will be used

3.4.1. UNIVERSAL IMPACT INDICATORS

The universal impact indicators (number of poor farmers benefiting and net attributable income) are in principle measured for each intervention. Job creation is not measured, because even though jobs may be created, this is not one of PRISMA's objectives.

Some interventions may not create attributable changes at goal level, or some may create extensive changes which makes it difficult to establish a counterfactual (regulatory changes for example will affect the whole sub-sector). For such interventions where measurement of attributable changes at goal level is not feasible, measurement will only be done up to lower level indicators and not up to goal indicators. Such a decision can only be taken on a case-to-case basis by the CMT, and will be made during the development of the Intervention Plan and recorded (along with the justification) on Overall MRM Strategy worksheet in the ISD.

3.4.2. POTENTIAL OVERLAPS WITH OTHER INTERVENTIONS

It is likely that there will be overlaps between different interventions: some farmers may benefit from more than one intervention. At the start of the intervention, the possibility of overlaps between interventions is recorded in the Overall MRM Strategy worksheet, with a reference to the other interventions and the geographical area (in terms of province or district). This information helps to define the measurement plan (for one intervention or combined for few interventions) and is useful information for aggregation across different commodities.

3.4.3. DISPLACEMENT

Displacement is the negative effect which an intervention may have, whereby one group benefits at the expense of another (for example, some farmers will increase sales, causing other farmers to sell less). Displacement may occur at many levels of the results chain (partners, service providers) but is only considered at the level of the farmers. In most cases, PRISMA works in growth sectors, and displacement is unlikely to happen. However, if it does, PRISMA has to 'address it'. This implies additional 'research'. How it will be measured will be decided on a case-to-case basis, a decision to be taken by the HRM/L at the start of the intervention and recorded in the ISD Overall MRM Strategy worksheet. If displacement is expected or seen this should be brought to the notice of the CMT and a strategic decision made on whether (for example) to proceed with the intervention, or to scale up.

3.4.4. ATTRIBUTION

The changes we will measure are partly due to PRISMAs interventions but also to other external factors such as weather patterns and macroeconomic changes which have an impact on the changes in the performance farmers. In order to isolate the changes and impacts which are attributable to our intervention PRISMA needs to estimate the changes and impact that would have happened anyway, even without the intervention. This is known as the "counterfactual". The impact attributable to our intervention is the difference between the counterfactual and the total change observed/measured.
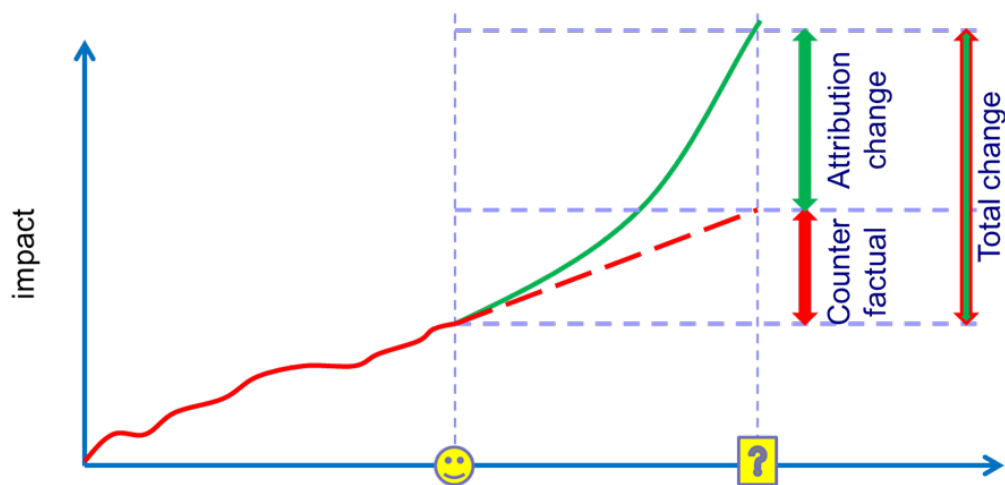
Figure 4: Estimating attributable changes

Various methods can be used to define the attributable impact. A number of these methods are briefly described below, with an indication of when to use them and when not. For each intervention, the first step is to define the attribution method.
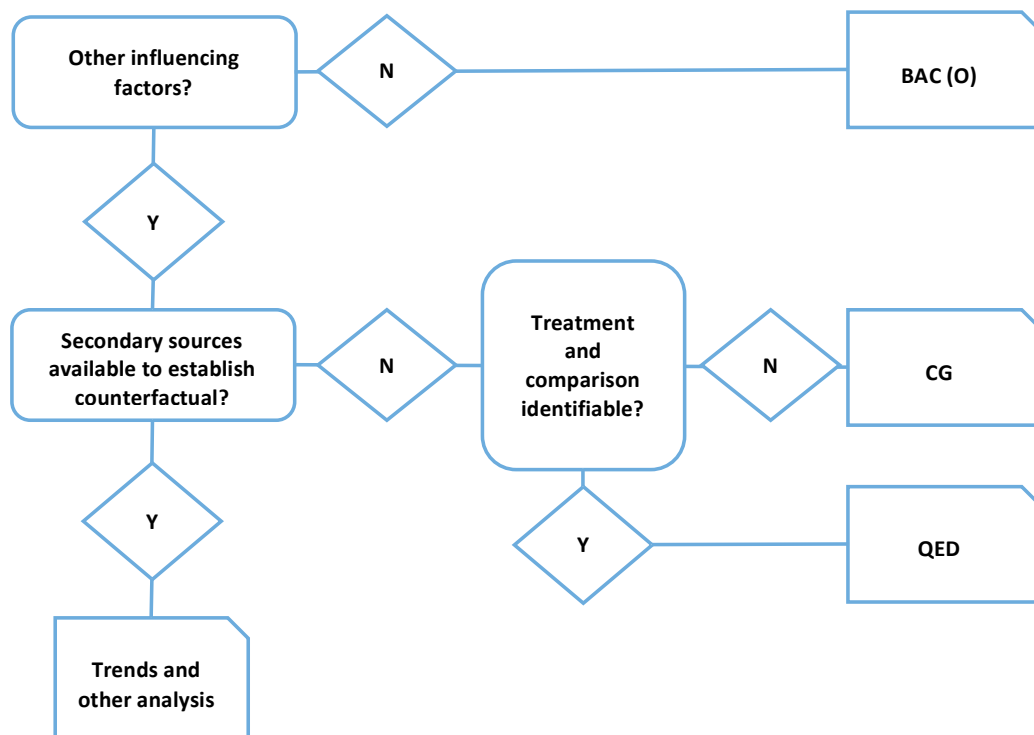
Table 5: Attribution methods

Attribution Methods	When to use it
Before and after comparison (BAC)	
Measuring the value of the (key) indicators a) before the intervention takes place (baseline), and b) after the intervention (end line). The difference between those two measurements is the change which is then reported (e.g. net additional income).	When the change is very obviously due to the intervention, i.e. there are no external influences that might affect the change. Because PRISMA is targeting farmers, it is very rare that there are no other external factors. The BAC method can be used to measure changes at lower levels (like that of the ISP and partner). However, even in this case we prefer to understand why the change took place. Hence, we always prefer to combine this BAC with Opinion.
Before and after comparison with opinion (BACO)	
The Before and After Comparison with Opinion is like the BAC method, with the addition that we also ask the opinion of the partner, ISP, farmers or other stakeholders involved. This provides us with confirmation of why the change took place or did not take place.	When there are no external factors possibly influencing the change, or when it is impossible to obtain data on the counterfactual either because the change affects the entire population or because it is not feasible to isolate those who are not affected. A BAC can be combined with collecting the opinions of respondents on whether the changes were due to the intervention. Opinions can also be collected from other stakeholders or key informants. Such consultations can be obtained using interviews, focuses group discussions or stakeholder workshops. The opinions are used to triangulate findings of the before and after studies.

Trend and other analyses using secondary data to establish the counterfactual	
A trend analysis compares the annual increase or decrease for a certain indicator (such as export value per year) over recent years and compares the change in that trend with the measured value of that indicator after the intervention. Other comparisons include comparing the smaller group of treatment farmers with the entire farmer population using secondary information.	If relevant and reliable statistical information is available on a number of key indicators, then one can compare the 'projected slope' (which would present the counterfactual) with the actual measured value; the difference is the change attributable to the intervention. One may also compare actual measured data with other data available for the entire population. These comparisons are challenging and should only be made if reliable information is available.

Quasi experimental design (QED)	
To carefully select one group of farmers which will benefit our intervention (treatment group) and another group of farmers that will not benefit from our intervention (comparison group) before the intervention takes place. We measure the before and after situation of both the treatment and the comparison group. This implies we have to do a BAC for both groups and compare both differences (the 'difference-in-difference').	Provides credible numbers, and is thus in principle preferred. However, it is very challenging to apply to M4P interventions, as to do so means categorising groups into those which will be benefited and those which won't, which is restrictive. The two groups chosen will also have to be very similar so that a comparison is feasible. In addition, it is resource intensive (two baselines, two end lines).

Comparing user and non-user groups (CG)	
To compare those farmers who benefited from our interventions (users) with who did not (non-users). The identification of users and non-users is often done using the intervention logic: some ISPs will be providing the service (resulting from our intervention), while others may not: hence the farmers who are clients of the latter can be part of the comparison group. We can also 'wait' and sample a number of farmers who are clients of the applying ISPs, and compare those farmers who applied (the advice) with those who did not.	This is easier to apply than QED as the program does not have to restrict farmers into groups of users and non-users. However, there may be a selection bias inherent in this method, i.e. those that used the product/services may be better off anyway than those that did not use the product/service. It can be used when we expect that not all potential users will actually become users (and leave no comparison group). The reason for farmers using or not using the service is crucial for us to understand. For many interventions, this will be the most practical attribution method.

Randomized control trials	
Identify at random from the entire population one group of farmers which will be using the service (treatment group) and compare it with a group which is not provided with the service (control group), also identified randomly. We measure the before and after situation of both the treatment and the control group. This implies we have to do a before and after comparison for both groups, and compare both differences (the difference-in-difference).	This method is considered the most statically rigorous. However it requires PRISMA to have control of determining who will and who will not be using the service since those using and not using will be randomly selected from the same group.

3.4.5. SELECTING THE ATTRIBUTION STRATEGY

To select the most appropriate attribution strategy, the first step is to identify the key external factors which might also affect the changes observed, such as weather conditions, or other donor or government programs. This, together with our knowledge of the sub-sector, will enable us to select the best measurement method, balancing between most appropriate and feasible. The following diagram is a guideline which can help to decide which research method to use for attribution. Other factors may also influence which methodology is chosen; the final methodology should be approved by the RMM and/or HRM/L. The attribution method selected must be described in the Overall MRM Strategy worksheet in the ISD.

Figure 5: Selecting the attribution strategy

3.5. ESTABLISHING THE BASELINE

The baseline records the values of the key indicators in the results chain before the intervention has affected farmers. Baselines are useful for, understanding the situation before the intervention takes place, making projections of changes, estimating the required degree of change for uptake of a new intervention idea, and for estimating actual changes resulting from the intervention. Collection of baseline information is also a necessary part of establishing the counterfactual.

3.5.1. WHEN AND HOW TO ESTABLISH BASELINES

This is dependent on whose baseline we want to establish:

- For partners it is generally possible to establish a baseline before the intervention is started. As they are our partners we generally know their situation regarding the new product/service before the intervention and a separate baseline study is generally not necessary.
- For intermediary service providers a baseline may be constructed during the sub-sector study or during the development of an IP. However, if this is not done in a representative manner at that time than it will be necessary to construct one later.
- For farmers it is important to make sure that a representative baseline study is done for the sub-sector. It may however not be necessary to have a baseline for each and every intervention. In a situation where the program is likely to have few interventions in the same area with the same target group (e.g. two interventions on beef cattle in Bima district), it will be sufficient to have one baseline study for both interventions.

The second factor to consider when planning a baseline study is when is the best feasible time. Ideally, baselines should be established before the intervention starts to affect actors. However, although an intervention might be planned with a partner, changes may occur during implementation (for example, service providers might not provide the product or service as expected, or partners might decide to work with service providers in other locations). Constructing a baseline too early may run the risk of it not being representative and resources thus being wasted.

The key question is, "Can we postpone as long as possible but before the relevant actors are affected?" This optimum time might be when service providers are 'about to start' providing the service; we can then establish the baseline *just before* products/services are provided. If the program decides to conduct a baseline in this manner it should take care to over-sample in case some of those who form part of the baseline do not actually change due to the intervention, (e.g. service providers decide not to provide the new service/product, some farmers decide not to buy the new service/product).

However, this approach could be too risky as the final beneficiaries are still likely to be quite different from the ones in the baseline. Alternatively, if it is not feasible to carry out a baseline before actors are affected by an intervention then we need to *reconstruct* the baseline later; this is also referred to as "recall". The advantages and disadvantages of establishing a baseline based on recall are given in the table below:

Table 6: Advantages and disadvantages of using recall

Advantages of recall	Disadvantages of recall
Using recall questions implies we only have to do the survey once: measuring the actual situation, and asking recall questions about the situation before the intervention took place. It is thus less costly and time consuming.	The risk, especially when dealing with interventions which are not changing much (where, for example, an additional service is leading to not too significant a change of yield) but also with farmers in general, is their ability to actual recall the before-situation.
If we use the comparison group attribution methodology, we can interview a sample of the farmers, categorize them into either users or non-users, and through recall establish the baseline for both the users (treatment) and non-users (comparison group).	Before deciding to reconstruct the baseline, that ability to recall therefore should be tested. We should also investigate (before we develop the measurement plan) whether we can make use of additional data collection tools, such as reliable and relevant statistical data, and of company records: are our PSPs and ISPs recording information about our potential users which we can use?

In some cases it may not be feasible to establish a baseline; this could be because the information could not be collected before the intervention, and/or because information based on recall is (or turns out to be) unreliable. In this case the program could use the situation of the comparison group as a baseline but only if it can ensure that the comparison and treatment groups are similar. If they are not, then the program could still report changes if the treatment group shows changes which are greater than two standard deviations away from the non-treatment group.

Another alternative would be for the program to use trend analysis based on secondary data as a baseline; however this would depend on whether the data for trend analysis is considered reliable.

3.5.2. WHERE IS IT RECORDED?

In the MRM Plan worksheet in the ISD we record when the baseline data was established or when it will be established. The plan for the baseline and progress according to the plan must also be saved in the "MRM Timeline" worksheet in the ISD. Once the baseline has been established we record the baseline data in the "Projection and Results" worksheet in the ISD.

Each baseline will need to be carefully planned: a research plan must be developed for the baseline (see Annex 3 for research design template).

3.6. MONITORING AND MEASURING CHANGES

Continuous monitoring of changes resulting from the intervention will be carried out from activity level up to goal level. This will be done using various tools (such as company records, observations, FGDs and in-depth interviews). To be able to carry out continuous monitoring and measurement it is important to plan carefully:

- When the changes are likely to take place?

- What is the most efficient way to combine the measurement of various indicators in one go?

- What combination of tools and sources should be used to triangulate the findings?

Normally, measurement during the intervention is not rigorous, but informative. This may, for example, be a mini survey of carefully selected respondents in order to understand if the business model works and if the projected impact is likely to be realized. It is important to document the methodology and limitations of the findings. The method used for continuous monitoring must be sufficiently rigorous for the indicator(s) being measured. For example observation is sufficient to know how many participants are at a workshop; however observation is not sufficient to know how many people apply a new practice.

It may sometimes be necessary to use non-rigorous methods to collect information, but such information should not be used to report results. It can however be used to adjust projections. In a situation where the intention is to report changes the program must collect information using reasonably rigorous research methods.

3.6.1. WHERE AND WHEN IS IT RECORDED?

For each and every indicator or set of indicators we must identify when the indicator will be measured (month and year), how it will be measured (using which method), and who is responsible for the measurement. This is done in the MRM Plan worksheet in the ISD. Dates of major studies to be carried out for the intervention are entered on the MRM Timeline worksheet.

The actual measurements are recorded in the Projection and Results worksheet in the ISD. Here, the actual current achieved value per indicator is entered or updated, with a reference giving the source of the information and the date (month and year) in which it happened. During the quarterly reviews there might be changes to activities; the MRM Plan worksheet thus should be reviewed and revised if needed.

3.7. LEARNING AND USING RESULTS

The key function of the results measurement system is to provide a feedback mechanism that will facilitate the learning and improvement processes. The information generated from the system will be used in several scheduled program reviews where the results are analysed and discussed; this will generate the lessons learned and measures will be taken to improve results. This section provides details about how to prepare and organise different types of review meetings (described in Chapter 2.2).

Table 12: Review Meetings

Type :	Monthly Review Meeting	
Length of review	Half a day per intervention	
Participants:	Led by:	Sector/BEE Manager
	Participants:	Sector and Intervention Co-ordinators Provincial Manager (for BEE intervention)
Inputs:	• Preliminary analysis of activities progress to date: ○ What is working or not working and why?	
Agenda:	• Present progress on activity implementation to date • What is working or not working and why? • What are key challenges and changes in the intervention? • What needs to be improved? • Review and revise activity plan accordingly	
Key decisions	• Adjustment to the intervention activities or strategy	
Expected output:	• Monthly report (for Co-facilitators only)	

Type :	**Quarterly Review**	
Length of review	1 day per intervention	
Participants:	Led by:	Sector Manager/BEE Manager
	Participants:	Sector, Intervention and RM Co-ordinator Provincial Manager (mandatory for BEE intervention, optional for others) RMM (optional), GSI Manager (optional)

Inputs:	• Updating the results achieved to date in the ISD
	• Preliminary analysis of results to date along the intervention result chains:
	  ○ What is working or not working and why?
	  ○ What probably caused the changes observed?	

Agenda:	• Present the progress to date along the intervention result chains • How have the changes happened? • What is working or not working and why? • Review the assumptions that are underlying the logic of the result chains • What are the key lessons learned? • What needs to be improved? • What changes need to be made to the intervention result chains? • Review ISD and revise if required	

Key decisions	• Adjustment to the intervention and ISD	
Expected output:	• Updated ISD	
Type :	Semi-annual review	
Length of review	• One and half day per sub-sector	
Participants:	Led by:	Sector/BEE Manager
	Participants:	Sector, Intervention and RM Co-ordinator
		One of the following: HRM/L, HBEE, HoSP, or DTL
		Provincial Manager (mandatory for BEE intervention, optional for others)
		RMM (optional), GSI Manager (optional),
		Senior Advisor (optional), Team Leader (optional)

Inputs:	• Updating the results achieved to date in the ISD
	• Preliminary analysis on results to date along the intervention result chains:
	    o What is working or not working and why?
	    o What probably caused the changes observed?
	• Preliminary analysis on overall performance of the sub-sector
	• Preliminary analysis of systemic change and sustainability	

Agenda:	• Present overall performance of the sub-sector • What are the key changes the sub-sector? • How they will affect sub-sector strategies and interventions? • What are the key lessons learned? • Any potential new intervention ideas, or possibility of exploring new interventions • Review ISD and revise if required	
Key decisions	• Prioritisation and resources allocation among the interventions • Adjustment to the interventions and ISDs	
Expected output:	• Semi-annual review meeting minutes	
Type :	Annual Sector & Portfolio Review – Phase 1	
Length of review	• 2 days per sub-sector	
Participants:	Led by:	Sector/BEE Manager
	Participants:	Sector, Intervention and RM Co-ordinator
		One of the following: HRM/L, HBEE, HoSP, or DTL
		Provincial Manager (mandatory for BEE intervention, optional for others)
		RMM (optional), GSI Manager (optional),

	Senior Advisor (optional), Team Leader (optional)
Inputs:	• Preliminary analysis on the overall performance of the interventions • Preliminary analysis on the overall performance of the sub-sectors • Review of GSD • Aggregate impacts across the sub-sector
Agenda:	• Assess overall results achieved to date by sub-sector? • What is working and not working? And why? • What are the key challenges and changes in the political, economic and social environment that will affect the sub-sector and its interventions? • What are the key lessons learned? • What need to be adjusted in the sub-sector
Key decisions:	• Continue, drop or add new interventions in sub-sector • Suggestions on changes to sub-sector growth strategy • Potential of continuing work in the sub-sector
Expected output:	• Updated ISD

Type :	**Annual Sector & Portfolio Review – Phase 2**
Length of review	• 2-3 days for portfolio
Participants:	Led by: — DTL, HRM/L
	Participants: — Sector Co-ordinator, Sector Manager, BEE Manager, HBEE, HoSP, RMM (optional), Senior Advisor (optional), Team Leader (optional)

Inputs:	• Presentations by Sector Coordinator/ PROMARK Manager on:
	   ○ Performance of sub-sector and its interventions
	   ○ Suggested revisions to sub-sector GSD
	   ○ Potential of scope of continuing to work in the sub-sector
	• Updated overall program projected and actual impacts
	• Comparative analysis across all sub-sectors and commodities

Agenda:	• Assess overall performance of the portfolio (i.e. sub-sectors and commodities) • With the current portfolio of sub-sectors and interventions can PRISMA meet the end of program targets? • What are the key challenges and changes in the political, economic and social environment that will affect the sub-sector and its interventions? • What are the key lessons learned across the program • What need to be adjusted in the current portfolio of sub-sectors • What potential changes does this mean for the annual plan?
Key decisions:	• Continue, drop or add new interventions in sub-sector • Suggestions on changes to sub-sector growth strategy • Potential of continuing work in the sub-sector • Continue, drop or add new sub-sectors in the portfolio
Expected output:	• Updated GSD • Annual sector and portfolio review meeting minutes

3.8. Documentation and record-keeping

The PRISMA Portfolio and Result Measurement System will produce and utilise several documents and reports to manage the implementation and learning process, and to measure and report results. These documents have to be systemically organised and maintained to ensure that the most updated version can be accessed when needed. The following table summarises the key documents including the timeline and person responsible for their updating and maintenance.

Table 11: Documentation and record-keeping

Document	Responsible for producing	Completion date	Responsible for maintaining	Updating
Summary Commodity Selection criteria	Head of Sector Portfolio	End of commodity selection process	Head of Sector Portfolio	None
Commodity Reports	Decide on case by case basis	End of commodity study	Head of Sector Portfolio	None
Sub-sector Growth Strategy Document	Sector Co-ordinator for PRISMA Program Co-ordinator for Co-facilitator	End of sub-sector analysis	Sector Co-ordinator for PRISMA Field Co-ordinator for Co-facilitator	Annually
Intervention Plan	Sector Co-ordinator for PRISMA Program Co-ordinator for Co-facilitator	Three months after approval of sub-sector GSD	Sector Co-ordinator for PRISMA Field Co-ordinator for Co-facilitator	None
Contractual Agreement with Partner	Sector Co-ordinator for PRISMA Program Co-ordinator for Co-facilitator	As needed	Sector Co-ordinator for PRISMA Field Co-ordinator for Co-facilitator	On demand
Intervention Steering Document	Sector Co-ordinator for PRISMA Field Co-ordinator for Co-facilitator	One month after the agreement is signed	Sector Co-ordinator for PRISMA Field Co-ordinator for Co-facilitator	At least quarterly
Field Monitoring Reports	Intervention Co-ordinator	One week after field visit	Intervention Co-ordinator	None
Research/study Report	Sector Co-ordinator for PRISMA Field Co-ordinator for Co-facilitator	Four weeks after survey field work is completed	Sector Co-ordinator for PRISMA Field Co-ordinator for Co-facilitator	None

Monthly Review Meeting minutes	Field Co-ordinator for Co-facilitator	One week after the meeting	Field Co-ordinator for Co-facilitator	None
Quarterly Review Meeting minutes	Field Co-ordinator for Co-facilitator	One week after the meeting	Field Co-ordinator for Co-facilitator	None
Semi-annual Review Meeting minutes	Sector Co-ordinator for PRISMA Field Co-ordinator for Co-facilitator	One week after the meeting	Sector Co-ordinator for PRISMA Field Co-ordinator for Co-facilitator	None
Annual sub-sector & Portfolio Review Meeting minutes	Head of Sector Portfolio or Head of Results Measurement and Learning	One week after the meeting	Head of Results Measurement and Learning	None
PRISMA Aggregation System	Head of Result Measurement and Learning	Half-yearly: one week before review meeting	Head of Result Measurement and Learning	Semi-annual
Semester Report to DFAT	Deputy Team Leader	End of February	Deputy Team Leader	None
Annual Report to DFAT	Deputy Team Leader	End of August	Deputy Team Leader	None

4. PLANNING AND CONDUCTING RESEARCH

For planning the quantitative and qualitative data collection, PRISMA has a research design template to be used as a guideline. The template can be seen in Annex 3.

4.1. DATA COLLECTION METHOD

The program must decide which data collection method should be used for which indicator(s). Rather than drawing conclusions from the single source, PRISMA will use a combination of methods and/or sources (**triangulation**) to assess the changes which take place. The table below summarises common tools that can be used to collect data and the situations when they should be used:

Table 7: Data collection tools

Tools	Explanations	When to use the tools
Observation	This is a technique whereby a researcher observes a group or event and takes notes on what takes place. The observation is direct when the researcher is present or indirect when other means of observing are used (for example, a video camera). The researcher should be aware that people may act differently when they know they are being observed.	• Quick assessment of what is happening and how • Particularly useful tool at activity and partner outcome level • To explore the process of change • Combined with regular field visit • To validate data from other sources
Records	Records or documents that partners, service providers or farmers keep	• Convenient way to get quantitative data related to those particular records and documents • 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	This involves a review of information that was collected in the course of another study or as part of a publicly-available set of data. It may be in the form of official statistics or other informal sources not generated by the researcher.	• As sources for projection • For triangulation • In some cases, to established counterfactuals
Key Informant Interview	These are qualitative in-depth interviews with individuals who have first-hand knowledge of the issues which will be addressed in the intervention.	• To gather information on specific issues which will be addressed in the intervention • To use as a source to enable projection • For triangulation • To explore causality
In-depth interviews	In-depth interviews gather qualitative information and explore the process of change extensively. They provide more in-depth analysis of the changes which are taking place and explore causality.	• 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 particularly if information is triangulated • Normal sample size is around 15-30 people purposively selected

FGD	Qualitative evaluation methodology in which small groups of people are brought together to discuss specific topics under the guidance of a moderator. FGDs are a good tool for getting the common view of participants but it is weak in understanding individual cases and socially sensitive cases	• 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 • For triangulation • To understand collective behaviour or perceptions • The normal group size is around 8-15 people purposively selected • It requires an experienced moderator
Survey	This is a data collection tool used to gather information about individuals based on a sample of target population. A survey normally used to gather quantitative data (also simple qualitative data) for a large number of respondents utilising structured questionnaires.	• 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 • Samples sizes guidance in Chapter 3.7

In addition to the above, a number of other qualitative methods can be used to help understand motivations and extent of behaviour changes. Some of these are listed in Annex 4.

4.2. CONDUCTING SURVEYS

Surveys will be used to measure many of the indicators of PRISMA, particularly key quantitative indicators such as outreach, productivity, incomes and service provider turnover. The proper planning and conducting of surveys will thus be key to accurate measurement. To ensure rigour of impact assessment and to optimise the use of resources, PRISMA will use the following table to prioritise its interventions in three different categories: low, medium and high priority. The sample size will then be identified by instructions related to each category. For example, for a high priority intervention, the number of samples will be based on 95 percent confidence level and 10 percent margin of error.

Table 8: Level of rigor in impact assessment

Expected Impact				
High	Medium Priority	Medium Priority	High Priority	
Med.	Medium Priority	Medium Priority	Medium Priority	
Low	Low Priority	Medium Priority	Medium Priority	
	Low	Med.	High	**Expected Outreach**

Priority	**Number of samples based on**
High	95% confidence level 10% margin of error
Medium	90% confidence level 10% margin of error
Low	Minimum of 30 samples

Once the sample size of a survey has been decided on, the questionnaire or interview guideline will be developed for each respondent group. The initial checklist of what to measure will be provided by the Sector Coordinators, this can be collected from the MRM Plan worksheet in the ISD. This checklist will be developed into a draft questionnaire by the RM Coordinator or by the research firm to whom the study is outsourced. The questionnaire is finalized by the RM Manager.

Based on this questionnaire the data entry template and an analysis plan will be developed by the RM Coordinator. The analysis plan sets out what analysis will be carried out using the data, and is a crucial item which must be completed before the survey starts. It is checked and finalized by the RM Manager and Sector Coordinator. The analysis plan can also be used to guide the team in revising the questionnaire if necessary.

Quality of data is crucial to ensure the quality of the research. Regardless of how large the sample size is, if the quality of the data obtained is poor, the results of the research will also be poor. Quality control of the research, in particular, large surveys, is extremely important. It is better to have small samples with accurate data than very large samples with faulty data. The following is the list of issues related to the quality control of data collection and analysis that need to be considered.

- Pre-test the questionnaire
- Train enumerators before the field work
- Roles and responsibilities: Who will do the interviews? Who will supervise? Who will perform other roles?
- How do you ensure the quality of the information gathering (for example, through spot-checks of staff in the field, random rechecking of completed questionnaires, oversampling to cover for errors)?

- How will you deal with the tendency of respondents to give 'desirable answers'?

- Quality of the data entry and tabulation/summarizing: supervision, check or double enter.

- Data cleaning methods to use

The following are tips for conducting a good survey:

Box 1: Tips for conducting good survey.
- Keep it simple, clear, easy, and short
- Find and review similar surveys conducted by others
- Do not ask respondents for information that requires them to refer to a file or other source
- Conducting follow-ups minimizes non-response
- Make sure the questions are well worded
- Avoid double-barrelled or double negative questions
- Use multiple items to measure abstract constructs
- Do not use leading or loaded questions
- Pre-test the questionnaires
- If survey is conducted by external enumerators, then:
    1. Ensure they are properly briefed and trained.
    2. Conduct a mock interview session with them.

5. AGGREGATION

A Results Measurement system must be able to aggregate results at the program level. This is important a) in order to track the cumulative impact of the program against its overall goal, and b) for reporting purposes. PRISMA's goal is to achieve a 30 percent increase in incomes for more than 1,000,000 male and female smallholder farmers by 2022; 300,000 of these will be reached by June 2018. In order to monitor the progress towards this goal, it is important to have a system in place which is able to aggregate (or add up) the results over time, while making sure that there are no overlaps.

The aggregation system followed by PRISMA will need to be able to do the following:

- Maintain a record of all interventions of the program. This will include on-going interventions, interventions which have been closed down, and interventions which are being planned (i.e. those that have an IP).
- Be able to aggregate projections of KPIs for all the interventions of the program.
- Be able to aggregate actual values of KPIs for all the interventions of the program.
- Ensure that all aggregations (both projected and actual) are overlap-adjusted.

All interventions and the values of their KPIs will be entered into the program aggregation file. This aggregation file hence has a record of all interventions and their KPI values (both projected and actual).

The next step for aggregating the KPIs is to account for overlaps between interventions. Typically overlaps mostly occur at the farmer level, thus other KPIs generally do not need to be overlap-adjusted. Nevertheless, the system for adjusting for overlaps will be the same. Adjusting for overlaps means that the program does not double count beneficiaries (that is, it makes sure that the same person/beneficiary has not been counted twice during aggregation and reporting).

Overlaps can occur when PRISMA has multiple interventions in the same sub-sector, or in different sub-sectors but in the same geographical area. This is illustrated in Table 9 below.

Table 9: Sector and geographic coverage

	Sub-sector 1	Sub-sector 2	Sub-sector 3	Sub-sector 4
Area 1	Intervention A		Intervention B	
Area 2		Intervention C Intervention D	Intervention E	
Area 3				Intervention F Intervention G
Area 4			Intervention H	

In Table 9, interventions C and D both occur in Area 2 of Sub-sector 2; there is therefore potential for overlap to occur between those two interventions, and farmers benefiting from Intervention C might thus also benefit from Intervention D. Similarly, with Intervention F and G in Area 3, Sub-sector 4 there might be overlaps, and those benefitting from intervention F may also benefit from Intervention G.

Overlap may also occur between sub-sectors within the same geographical area, for example between the beneficiaries of Intervention A and Intervention B, or between the beneficiaries of interventions C, D and E.

The first step in dealing with overlaps is to identify in which interventions they are likely to occur, and this is done in the Overall MRM Strategy worksheet in the ISD. The next step is to determine how much overlap occurs, potential scenarios and how to handle them, which are explained below.

Scenario 1: In the first scenario there is no significant overlap between interventions. In this case, the numbers can be simply added and become aggregated numbers.
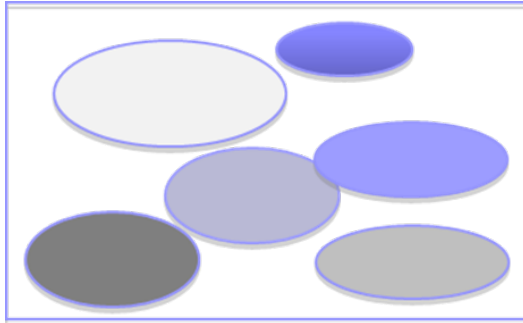

Figure 6: No significant overlap among interventions

Scenario 2: The second scenario is that one intervention might cover most of the outreach number. In this case, PRISMA can report only the biggest one and ignore the rest since most of the beneficiaries in other intervention(s) will be the same as the biggest one.
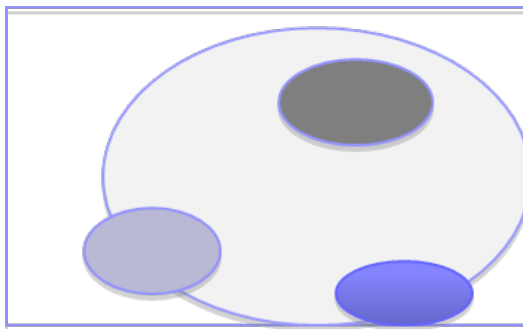

Figure 7: One intervention covers most of the outreach

Scenario 3: The third scenario is that there are significant overlaps among interventions but none are large enough to cover the others. In this case, the overlapping parts have to be estimated and deducted from the total added-up numbers.
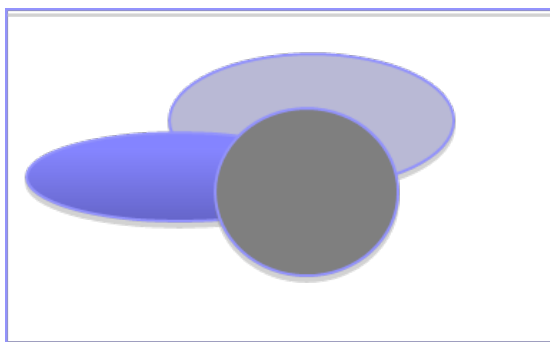

Figure 8: Significant overlap among interventions

The Sector Coordinators should be able to say how much overlap there might be between interventions. If the assumption is that the degree of overlap is similar to the situations in Scenario 1 or Scenario 2 then adjustments can be made at the point of aggregation. However, if the overlaps are likely to be similar to Scenario 3 then it might be necessary to investigate how much overlap occurs.

This might be done by talking with ISPs or during surveys of beneficiaries asking whether they are affected by other interventions. The percentage of beneficiaries affected by other interventions can then be estimated from the responses obtained; the percentage of overlaps can then be deducted from the total for the intervention

The appropriate method to be used to assess the amount of overlap for an intervention should be judged on a case-by-case basis. The same applies to overlaps between impacts measured as the result of systemic changes (impact due to copying and crowding-in).

Additional income changes reported from interventions are generally mutually exclusive and attributable to a particular intervention. The issue of overlaps here is therefore less likely to occur and income changes can simply be added up. Sometimes however, it will be difficult to isolate the attributable impacts to income and ascribe them to a particular intervention. For example, where two interventions (one involving good seed, the other good fertilizer) working in the same area reach the same beneficiaries, ascribing income increase to either seed or fertilizer may not be feasible because the beneficiaries have used both. In a case like this the income increase for both interventions will be measured in one go and reported once. However, this has to be decided on a case-by-case basis.

6. SYSTEMIC CHANGE

There are many definitions of systemic change; no one definition seems to be widely accepted. The main reason for this is that what constitutes systemic change varies depending on the market systems and the contexts within which they operate. The DCED Standard has no set definition of what is systemic change; it allows the use of various definitions, but it expects each to have the following three characteristics (see DCED paper on Assessing Systemic Change, August 2014):

- **Scale**. Systemic changes influence and benefit a large number of people who were not directly involved in the original intervention.
- **Sustainability**. Systemic changes continue past the end of the program, without further external assistance.
- **Resilience**. Market players can adapt models and institutions to continue delivering pro-poor growth as the market and external environment changes.

6.1. OVERVIEW OF PATHWAYS TO SCALE AND SUSTAINABILITY

PRISMA will generally start interventions as a pilot on a small scale. Depending on the success or performance of the pilot the intervention will be scaled up. This should be done in a manner which takes into consideration each of the above three characteristics of systemic change. PRISMA also anticipates that scaling-up will take place in its markets in the following three ways:

- Program partner(s) expand the business model(s) in the same areas, with or without program support.
- Program partner(s) expand the business model(s) in new areas, with or without program support.
- Other organizations adopt the business model introduced by the program in either new areas or the same area.

In each of the above cases, whether the program gives support or not and to what degree will be decided by the HBEE/HoSP and DTL on a case-by-case basis. It is however expected that support from the program will decrease and that the business model will be adapted to the changing situations or contexts. The table below explains how or why upscaling may take place in one of the above ways:

Table 10: Up-scaling phase

Upscale phase	Same area	Other areas
Same partner	The partner takes the business model and scales it up without support, or The business model might not be sustainable (enough) and may need slightly longer term support, or A new or adapted business model is introduced and may require a new intervention.	The proven business model should be attractive enough to be replicated by the partner without support. However, due to differences in context or the need to adapt the business model to the new area the program may repeat the same intervention, possibly with a reduced contribution from PRISMA.
Other partners	Crowding-in may happen spontaneously, or The program may stimulate crowding in, or If the business model is difficult to adopt or not attractive enough for spontaneous crowding-in, the program may replicate the intervention (possibly with the same or adapted business model, possibly with reduced contribution from PRISMA).	Crowding-in may happen spontaneously or the program may stimulate crowding-in. If not, the same intervention may need to be replicated in the new area with the new partner, possibly with reduced contribution from PRISMA).

As the program continues in implementation it will continue to monitor the sub-sectors to better understand and identify pathways of systemic change which are occurring or can occur. For the time being, the program will aim to achieve systemic change in the manner described above, and will continue to capture the effects of copying and crowding-in for each intervention. In addition, PRISMA will, until then, measure and report the few indicators which can indicate systemic change:

1. KPI 1: Total number of farmers benefiting from innovations (due to pilot interventions, replicating or up-scaling interventions, copying and crowding in)

2. KPI 3 & 4: Total number of service providers applying new business models and generating revenue through new business models (due to pilot interventions, replicating or up-scaling interventions, and crowding-in)

3. KPI 7: Total number of business partners applying new business models (due to pilot interventions, replicating or up-scaling interventions, copying and crowding-in)
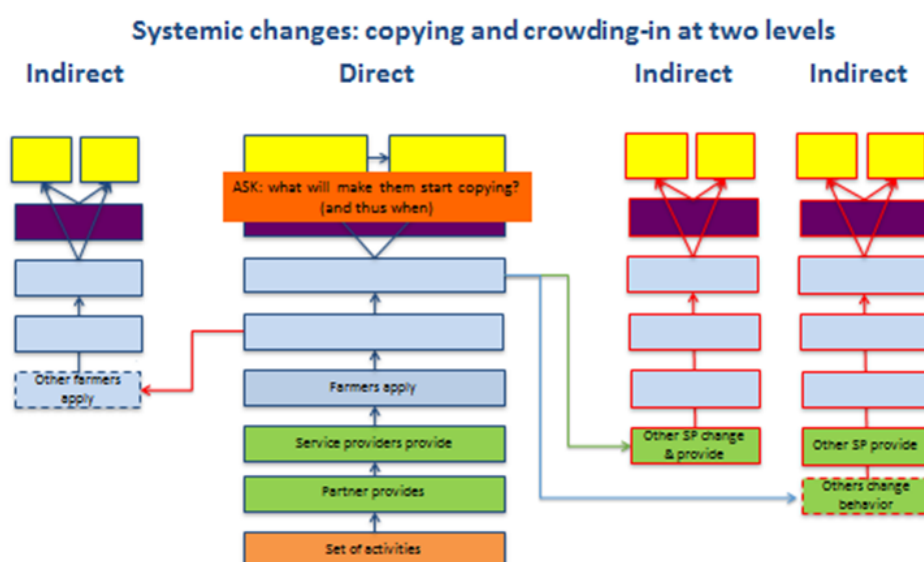
6.2. COPYING AND CROWDING-IN

Figure 9: Copying and crowding-in

6.2.1. COPYING

Copying occurs when certain farmers adopt the behavioural change of those farmers who changed their behaviour as a result of the intervention. The copying farmers do not make use of the embedded service or new products, but simply copy that behaviour; they are classified as "indirect beneficiaries". However, if they become clients of the service provider as well, they are not defined as "copying" but are equal to the directly targeted farmers, and recorded as "direct beneficiaries".

For all interventions, the Sector Coordinator must first consider whether it is likely that copying will happen and that indirect beneficiaries will be reached. This depends on the advantages (income

changes), the ease of copying (is it feasible to copy the behaviour without having access to the same services or products which the intervention introduced), the visibility of the behaviour change (is it noticeable) and other factors.

If copying is expected, it should be shown in the results chain and indicators should be defined for measuring it. These indicators should include the reason for copying (attribution) and the ratio of copying (i.e. how many direct beneficiaries will lead to how many copying farmers).

6.2.2. CROWDING-IN

Crowding-in occurs when other companies, comparable to PRISMA's partner(s), change their behaviour by copying the innovative business model which the PRISMA partner(s) introduced but without PRISMA's support. Crowding-in can also occur at the service provider outcome level when other service providers copy the service/business model of the initial service providers without becoming clients of the PRISMA partner.

If the service provider does become a client of PRISMA's partner than this is not considered crowding-in, but to be growth of the business model. Beneficiaries reached through crowding-in are considered to be "indirect beneficiaries"; those reached as a result of the growth of the business model are "direct beneficiaries".

For all interventions the Sector Coordinator must assess if crowding-in is likely to happen. If it is expected, it should be shown in the results chain and indicators should be defined to measure it. These indicators should include the reason for crowding-in (attribution) and the impact of crowding-in on all actors up to farmer level.

Measuring crowding-in, which often takes place (much) later, requires an investigative approach. Partners, service providers and PRISMA team members 'know the market' and thus will observe changes in the behaviour of 'competitors'. If crowding-in is noticed (through observations, interviews with partners and stakeholders), those crowding-in must be interviewed to find out if the behavioural change is due to our intervention or not (attribution). If so, we need to verify if the resulting changes (along the results chain, from partner output to farmer impact level).

7. CROSS-CUTTING ISSUES

PRISMA will also focus on a number of key issues which are central to the program and cut across all sub-sectors. These include:

- Poverty reach
- Gender and social inclusion
- Environment
- Food security

It is essential that these are integrated into every intervention and/or sub-sector. The decision as to how the integration occurs will be context-specific but what is important is that it is looked at. The sections below explain the boundaries the program will use to define these issues and how it will integrate them into its activities.

7.1. POVERTY

The goal of PRISMA is to increase incomes for poor farmers. PRISMA's aim is in line with and supports Masterplan Percepatan Dan Perluasan Pengurangan Kemiskinan Indonesia[2] (MP3KI) sustainable livelihood development pillar, particularly in the rural areas, as the program seeks to increase the competitiveness of smallholder farm households. This includes landless farmers, poor and near-poor farmers as defined by the $2 PPP poverty line, as well as agriculture-based or agriculture-related small businesses in rural areas. 'Better-off' farmers are not necessarily non-poor: in PRISMA target areas, around 60% of farmers are classified as poor and near-poor (below the USD2 a day PPP poverty line, which is equivalent to the 150* national poverty line, or PL150).

However, the M4P approach works through markets and works according to business incentives. This means that many interventions will be designed so that all farmers can benefit *including/especially poor farmers*. In turn, this means that PRISMA will ensure that all interventions are designed to reach poor farmers and generate benefits for them. This is done through a number of steps. Firstly, a key factor when deciding which commodity, sub-sector and intervention to work in is whether poor can benefit from PRISMA's work. Commodities or sub-sectors which do not provide scope for the poor to benefit are not selected.

The same rule applies for interventions. The only exception is where the intervention has the scope to unlock a key constraint within the sub-sector in which it can create significant growth, or can open up opportunities for other pro-poor interventions. Decisions about these kinds of interventions need to be taken by the CMT and the reasons for taking them carefully documented. The integration of poverty reach is thus integral to all interventions within the program.

Finally the program will, as part of its measurement system, use the Progress out of Poverty Index (PPI) developed by the Grameen Foundation[3] to assess whether an intervention's beneficiaries are poor or not. Interventions where the beneficiaries do not have a significant likelihood of being poor will not be continued. Those where beneficiaries do have a significant likelihood of being poor will be considered for scale-up and continued investment by the program.

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[2] This refers to the GoI master plan for the acceleration and extension of poverty reduction in Indonesia
[3] Grameen Foundation has developed a set of ten indicators which can be used to assess the likelihood of the respondents being poor. It has done this for a number of countries, Indonesia being one. The current PPI for Indonesia is based on the 2010 Indonesia National Social Economic Survey data conducted by Indonesia's Badan Pusat Statistik (BPS).

The profile of farmers in terms of who is poor and how is that defined will vary across regions; the profile of each region will be defined in the sub-sector growth strategy document. PRISMA will use the PPI to identify the poverty levels of its beneficiaries. However, due to the variation in the definition of poor across different provinces, the program might look into the development of regional PPI's.

7.2. GENDER AND SOCIAL INCLUSION (GSI)

Women, the young or elderly, people with disabilities, ethnic minorities, youth and poorer farmers often lack access to opportunities and assets needed to move out of poverty. The overall approach of PRISMA is Making Markets Work for the Poor (M4P). The M4P and PRISMA approach emphasizes economic growth as the path to poverty reduction, and does not pursue separate social inclusion objectives. However, gender and social inclusion –within an M4P framework – are priorities for PRISMA.

PRISMA will analyse the potential effect on gender and the socially excluded during the sub-sector analyses and this will be recorded in the sub-sector GSD. This information will be used in designing and selecting interventions, the aim being that the interventions are able to integrate gender and the socially excluded, or at the very least do no harm. In cases where it is obvious that a significant positive impact on women will be achieved and on the socially excluded, case studies will be developed on a case-to-case basis. In June 2014, PRISMA developed a Gender and Social Inclusion Strategy which guides the program in how to integrate women and the socially excluded into its interventions.

7.2.1. STRATEGY FOR GSI

The GSI unit of PRISMA will promote and support the inclusion of women and other marginalized groups in program interventions. Key objectives of that will form part of this strategy include improving women's access to economic resources and promoting/ensuring women's participation in access to information and decision making at all levels, acknowledging that providing equal rights and access to resources and opportunities to women and marginalized groups is crucial to the goal of reducing poverty. It will therefore be critical for each intervention to be based on an understanding of the specific factors that affect women and marginalized groups and the role they play in the production of different commodities, value chains and practices. This will be done through the following processes:

For pre-implementation phase: Program materials provide the reference foundation for staff and sector support – from training materials to guidelines and tools. As the program develops, existing materials will be adapted to be more 'inclusive' in language and recommendations. This has been done in AIP-PRISMA Guidelines, as well as an orientation module on gender inclusion. Such gendered materials will be necessary resources for staff and partners in their efforts to be inclusive in intervention and activity planning. Underpinning intervention design, and the results chains that illustrate the intervention, are sub-sector review documents that report on findings and analysis of the sectors. In order for the sub-sector reports to be used in designing interventions for inclusive economic growth, the sub-sector reports themselves must elaborate roles of various actors in the value chain, taking into consideration gender, ethnicity, age and level of poverty.

PRISMA Results Chains, Intervention Plans and Inclusion: The first step in determining how inclusion might be mainstreamed into PRISMA is to understand the result chain. In particular, understanding the bottom levels of the results chain, and the specific interventions and activities that are undertaken by the program, its partners and the service providers will enable us to design effective interventions that are inclusive of women and other marginalized groups as appropriate.

- **Activities Level:** Promotion of inclusion at the activities level requires an understanding of the roles of the actors in the sector, their contributions to the specific product, the

interventions that will be appropriate to their knowledge and skills, resources, time availability, and so on. 'The actors in the sector' can be men, women, ethnic minorities, youth, the elderly, the very poor or people living with disabilities. For example, even in a men's crop such as mangoes or coffee, women may play an important role in harvesting and post-harvest handling which can affect the quality of the product (through handling, processing, sorting, grading, packaging etc.).

- **Partner Outcome:** This level of the program involves joint investment with the proposed business partners (BP), and it is important to convey gendered knowledge to the partner, to encourage inclusion, and to agree upon the types of activities or approaches that the partner will undertake while taking the business perspective and incentives of the partner into account.

- **Service Provider Output and Outcome:** ISPs are selected and supported by the program partner. If the partner has a good understanding of the sector actors (including the roles that women and other marginalized groups play) this can guide their selection of and support to ISPs. For example, if women have a significant leadership role in a sector, SPs need to be selected that are representative of their participation and contribution. If partner's are not aware of women's roles, there may be an unintentional inappropriate focus on men as service providers and farmers, which will result in diminished roles of and outcomes for women in the sector. ISPs must understand the varying constraints and opportunities of working with different types of farmers, and the ISP level of commitment must reflect the investment and support of the partner and the program. If, for example, women or target ethnic groups have been included as ISPs then this will definitely increase outreach to women and ethnically diverse farmers. However, even when there are no suitable service providers from the target group, the selected ISPs still need to incorporate appropriate numbers of target farmers.

- **Farmer outcome, competitiveness and income:** M4P programs do not work directly with farmers thus PRISMA will have little to do at this level. However, if gender inclusive strategies can be adopted at the other preceding levels, gender inclusiveness or at least a do no harm strategy at this level will be ensured.

7.2.2. *INCLUSIVE RESULT MEASUREMENT AND LEARNING*

With regards to actual measurement of GSI sensitive results it is important to recognize that the household is the economic unit in rural Indonesia, where agricultural sectors involve both men and women, the household will count as one total unit (or one farmer) for the purpose of tracking benefit. Thus PRISMA will measure and report using 'smallholder farmer households' as the unit of measurement. These households will include men and women. For most interventions, the effect on gender equality cannot be measured simply by disaggregating men and women at user level, because farm work and decisions on farm investment is generally done by the whole household, and the additional income is also used for the household and not for individual men or women. However, the program will distinguish between female-headed households and male-headed households to obtain gender disaggregated figures. In addition to that it will be important for the project to document men and women's roles in the sector to illustrate their contributions, and to ensure that interventions are designed to reach both male and female involved in agriculture. Where economic activities within an intervention are under the purview of women or other marginalized groups – for a variety of reasons such as a sector dominated by women or high male out migration, intervention targeting a minority group – then these interventions will specifically report on the numbers of participants according to the target group. Qualitative assessments through in-depth interviews, impact stories and focus group discussion can further understanding of the outreach and impact to women and other marginalized group – particularly poorer farmers and

youth. These will be added in 2014 for women and then in 2015 for poorer farmers and in 2016 for youth.

The above framework can be supported by quantitative indicators and therefore included in baseline and impact assessment studies, providing a rich resource on impact on women and marginalized in the target sectors. Examples of quantitative indicators aligned with the framework are included in the following table.

Table 11: Possible quantitative indicators to measure in GSI

Income (gross)
Income (net)
Number of trainings suitable for women and men
Number of workshops including women and men
Assets made accessible to women
Value of assets owned by women
Services made available to women
Number of times women have accessed target services (can compare to same for men if relevant)
Change in areas where women can make decision (list)
Areas where women do not have input into decisions (list)
Hours a day working in HH
Hours a day working in fields (can be done by task

While quantitative data provide some of the information needed to track women's economic empowerment, a richer understanding is derived from qualitative assessment. An annual qualitative assessment, following selected (across sectors and districts) women longitudinally, can provide information on impact of project interventions. These annual assessments also provide material for case studies and impact stories with the opportunity to disseminate information on program successes that can be replicated elsewhere.

7.3. FOOD SECURITY

Interventions which have a direct positive effect on food security are those that lead to higher productivity and production of farmers' food crops. Food security can also be affected by poor farm households having sufficient income to spend on food or being less vulnerable to economic shocks due to having more income. PRISMA will therefore investigate the use of crops for food consumption and also, on a case-to-case basis, whether increased incomes lead to any significant positive or negative impact on food distribution and/or consumption.

7.4. ENVIRONMENT

AIP-PRISMA's Environment Management System (EMS) has been designed to reflect the Australian Aid's Environmental Management Guide Objectives[4]. The environment is defined in the following ways

- ecosystems and their constituent parts, including people and communities
- natural and physical resources
- qualities and characteristics of locations, places and areas

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[4] See http://aid.dfat.gov.au/Publications/Pages/2297_1393_1917_9648_6600.aspx

- heritage values of places
- social, economic and cultural aspects

The EMS seeks to ensure that negative environmental impacts are identified and mitigation strategies adopted. It also seeks to take advantage of positive environmental opportunities where these are feasible, and where there are incentives for stakeholders in a sub-sector to do so. Negative and positive environmental impacts are defined below:

- 'negative' environment issues (e.g. threats to the environment, such as resource degradation and pollution, exposure to climate change and extreme events, or other impacts that affect poor people and undermine sustainable economic growth);

- 'positive' environment issues (e.g. opportunities for increased biodiversity, opportunities for the sustainable use of environment resources to reduce poverty and support economic development).

The EMS also recognises that environmental impacts may be either *direct* (those directly caused by programme investments such as introduction of new infrastructure or species), or *indirect* (those downstream effects arising from investments such as impacts of increased transportation, or improved environmental awareness).

The EMS integrates environment, climate change and disaster risk reduction considerations under one framework. Climate change has the potential to interact with, and potentially magnify, other environment phenomena such as desertification, biodiversity loss, air pollution or the increasing scarcity of fresh water. The EMS will ensure that AIP-PRISMA assesses the broad environmental contexts of the sub-sectors and geographical locations in which the program works to ensure it minimises negative impacts and does no harm through its activities. In addition, where appropriate, it will consider investing in activities that promote environmental conservation, sustainable resource use, mitigate adverse effects of environmental changes and improve poor peoples' resilience to environmental shocks and other effects of climate change. However, these 'positive' activities will only be pursued where there is a clear incentive for the actors involved in a specific subsector. Environmental aspects will be integrated into the program governance system through the four steps described below.

7.4.1. ENVIRONMENTAL ASSESSMENT AND PLANNING

Environmental assessment of the proposed sub-sectors will be a critical element of the scoping and selection process and a threshold criterion for proceeding to implement an intervention. As part of the design phase, each intervention in a given sub-sector will undergo an environment analysis. A subsector consists of a combination of an industry sector and a geographical location. Each sub-sector may have a number of different interventions. The design stage will be the first evaluation point to ensure that the program promotes minimises environmental risk. This also presents an opportunity to assess the possibility of including interventions that can promote better management of the environment, including improving the resilience of the targeted groups of stakeholders (i.e. poor farm households in eastern Indonesia) and interventions to the impacts of current climate variability and future climate change. The responsibility for undertaking the environmental assessment is the responsibility of the Results Measurement and Learning (RM/L) team. To conduct the environmental assessment, the program will draw support from experienced environment specialists to review its strategies, look for potential environmental effects and identify areas to improve, in line with program's approach and goals. The initial outputs will be a high level Environmental Analysis for the AIP-PRISMA programme as well as for each proposed sub-sector intervention. Where the impact of the intervention on the environment or the exposure of the intervention to the environment are considered to be moderate or low, it will be the responsibility of the team leader of the intervention to decide what further action is undertaken. Where either

impact is considered to be high, then the RM/L will be responsible for undertaking a more formal risk appraisal.

7.4.2. IMPLEMENTATION

During implementation, any environment assessment and management requirements determined during the assessment and incorporated into the EMP section of the ISD will be delivered alongside the main investment and project activities. All decisions and activities undertaken during implementation relating to the environment are recorded in the EMP section of the ISD. Where environmental aspects are identified during the Environmental Assessment monitoring for expected environment impacts will form part of the regular monitoring and evaluation plan. If new environment impacts arise during implementation, which were not identified during the design phase, AIP-PRISMA will undertake appropriate assessment and planning so the new environment impact can be appropriately managed. Each intervention is assessed on two criteria:

- The risk of negative impacts of the intervention on the environment
- The exposure of the intervention to environmental and climatic risk

These criteria are assessed on a three point scale:

- *Low:* There is limited environmental risk or exposure associated with the subsector interventions, and/or interventions incorporate sufficient mitigation or resilience measures. There is very limited need for additional risk mitigation measures and/or monitoring;

- *Moderate.* There is a moderate level of environmental risk or exposure associated with the sub-sector interventions, and opportunities exist to further reduce risk and build resilience. The team should monitor environmental risk and exposure and mitigate risk where possible;

- *High:* There is a high level of environmental risk or exposure associated with the interventions, and further review and integration of mitigation/resilience measures are required. The Portfolio team should look at ways to carry out a more detailed assessment and identify potential mitigation strategies to adopt.

7.4.3. MONITORING AND EVALUATION

During implementation, environment performance will be monitored and evaluated where appropriate. Each subsector and the associated interventions will be reviewed semi-annually, and where appropriate this review will include a discussion about the environment. This is to determine whether environmental outcomes have been achieved. Where new environment issues arise during implementation of the activity then these need to be assessed and managed with additional indicators adopted. The programme will report semi-annually to the donor, and the semi-annual reports will include a section on the environmental impact, and/or any issues and risk mitigation activities arising during implementation.

7.4.4. TRANSFER OF CAPACITY

The program will initiate activities to build and improve capacity and awareness of environmental contexts and impacts amongst the program's technical team and its external implementation personnel. This is to ensure that there is a common understanding regarding the program environmental strategy across the implementers and partners of AIP-PRISMA, and all relevant staff are able to assess the contexts in which they are working and collect appropriate (and critical) information to feedback into the decision making process. AIP-PRISMA will to transfer knowledge and skills to allow beneficiary communities to continue to apply environmental best practice following programme implementation.

8. SUMMARY OF STAFF ROLES AND RESPONSIBILITIES

Monitoring and Results Measurement is integrated in the PRISMA management system: it is everybody's job. Implementation teams are formed based on commodities, with one team focusing on one commodity across a number of sub-sectors. The teams will consist of Sector, Intervention and Results Measurement Coordinators. Together they will be responsible to manage and monitor the interventions, but each will lead specific tasks.

The roles and responsibilities of PRISMA team members are detailed in Annex 6; this specifies who does, who is involved, who supports, who is informed, and who approves. Table 13 below presents a summary overview. Reference is also made to Chapters 2.2 and 3.7 where the Portfolio and Results Measurement review cycle is detailed (who, when, how) and Chapter 3.8 on reporting and documentation where titles, responsibilities and frequencies are detailed.

Table 13: Roles and Responsibilities

Tasks:	Who does?	
	PRISMA's Interventions	**Co-Facilitators' interventions**
Location profile	Provincial managers	PRISMA Provincial Managers
Annual Sector & Portfolio review	CMT with Commodity Managers	PROMARK Managers
Commodity studies (national)	TBD by CMT (in house or outsource)	TBD by CMT (in house or outsource)
Sub-sector analyses	Commodity/BEE Coordinator	Program Coordinator
Sub-sector GSD	Commodity/BEE Coordinator	Program Coordinator
Deal-making	Commodity/BEE Coordinator	Program Coordinator
Intervention Plans	Commodity/BEE Coordinator	Program Coordinator
Intervention Steering Document	Commodity/BEE Coordinator	Field Coordinator
Regular monitoring	Intervention Coordinator	Intervention Coordinator
Research Plans (surveys)	RM Coordinator	RM Coordinator
Developing questionnaires (surveys)	Intervention and RM Coordinator	Field Coordinator and MRM person
Data collection (surveys)	Sector, Intervention and RM Coordinator	Intervention Coordinator and MRM person
Data cleaning	RM Coordinator	MRM person
Data Analyses	Intervention and RM Coordinator	Field Coordinator and MRM person
Reporting	Sector and Intervention Coordinator	Field Coordinator/PROMARK Manager
Aggregation at sub-sector level	RMM	RMM
Aggregation at program level	HRM/L	HRM/L

9. DCED AUDIT

The Donor Committee for Enterprise Development (DCED) is an organisation which is committed to the development and sharing of good practices in private commodity development. It currently has 23 members comprising of bi- and multi-lateral donors and agencies, one of which is DFAT. The DCED has developed a standard known as the DCED Standard for Results Measurement which provides guidance on measuring and reporting credible results for private sector development programs/projects.

PRISMA is committed to upholding the DCED Standard and the Results Measurement System and has been developed from the ground up to comply with the Standard. For details on how PRISMA adheres to the standard, please refer to Annex 1: Complying with the DCED Standards.

In connection with the DCED Standard, PRISMA intends to hold a pre-audit review of its Results Measurement System in 2015. The pre-audit review will help PRISMA to take stock of how well the MRM system is functioning and to what extent it is complying with the Standard. The findings of the pre-audit review will be used to identify any shortcomings in the MRM system so that appropriate measures can be taken in preparation for the full DCED audit. The findings of the pre-audit review will suggest adjustments, and the PRISMA will decide how long it needs to carry these out before holding a full audit. The program however anticipates that a full audit should take place in May 2016. PRISMA will start implementing its MRM system in accordance with the DCED Standard as soon as interventions start rolling out on the ground.