Calculating Outreach and Impact Projections

A guide to developing Intervention Business Calculations

August 10 2015

Version 0.0

TABLE OF CONTENTS

Calculating Outreach & Impact Projections

A guide to developing Intervention Business Calculations

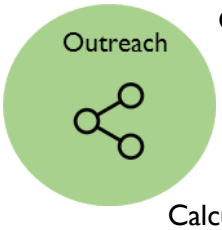
PURPOSE

To provide guidance to staff on how to fill in the Projection and Business Calculation spreadsheets as part of their preparation for the Intervention Concept Note (ICN), the Intervention Plan (IP) and the Intervention Steering Document (ISD).

NOTE TO READER

This guide should be used in conjunction with the Induction Manual Guidelines and specifically Guideline 23 – Calculating Outreach, and Guideline 24 - Calculating Incentives and Returns.

WHY DO WE NEED TO CALCULATE OUTREACH AND IMPACT PROJECTIONS?

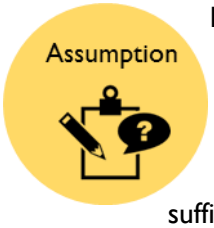


Calculating outreach – or the number of target groups that can be effectively engaged economically as part of an intervention – is an important part of the initial market assessment. Calculating outreach also informs the business calculations, which are used to calculate the incentives and returns for the relevant market players. Collecting this information is not always a simple process and requires insight and a good analytical mind. In the initial stages of an intervention mapping process, calculating outreach, and other key financial indicators, is a useful analytical tool to identify the overall business potential of the selected sector in the market that we intend to target. Calculating the financial potential of an intervention is an integral part of the M4P process and this will continue in an iterative way from the inception of the intervention through to the implementation period, by way of the ISD, as more detailed information comes to light.

HOW ARE OUTREACH & IMPACT PROJECTIONS CALCULATED ON PRISMA?

When PRISMA first commenced in 2014, outreach and the associated financial indicators related to incentives and returns were calculated to provide a market justification for entering into a sector and a basis for approving an intervention. The original business calculation sheets were developed as part of the pilot program under IMDI. Implementation experience to date has shown that the initial outreach calculations were often over optimistic and too simplistic. This led to insufficient intervention planning and misinformed decisions during implementation. As PRISMA gained implementation experience, it became evident that a more systematic approach to calculating the projection figures was required to develop more realistic outreach numbers during the intervention design phase. Under the Co-Facilitator Batch 11 program, PRISMA trialed an improved outreach and business impact tool, which has culminated in the attached Excel Workbook, that PRISMA is now proposing as an improved basis for calculating outreach and impact projections.

ASSUMPTIONS



Experience showed that initial business calculations for PRISMA-supported interventions were overly ambitious because the assumptions used to develop the calculations were not sufficiently detailed or realistic. PRISMA now uses two different type of assumptions in calculating the potential outreach and potential impact:

- **Outreach assumptions** – or the potential impact on the total number of poor farming households that gain an income from the intervention. This is determined by looking at a number of factors related to access and the activeness of the relevant Intermediate Service Providers (ISP) and purchasing behavior of the farmers
- **Economic assumptions** – or the impact on the anticipated income of the key market players. These assumptions are based on the buying behavior of the farmer and the pricing behavior of the market players as well as expected increases in productivity. This enables PRISMA to estimate the total turnover of the Private Sector Partners (PSP) and ISPs and the increase in the

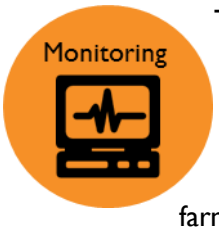
income of farming households as a result of the intervention.

Assumptions are determined for the different stages of the intervention, namely:

- The pilot phase – usually no more than 1-2 production cycles; and
- The scale-up phase, including: replication in the same area; using the same business model but with a different partner; and/or engaging a higher leverage partner.

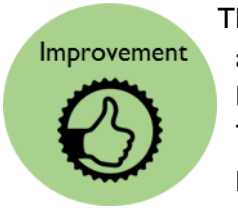
Getting the assumptions right is key to developing sound outreach and impact projections.

THE LINK WITH RESULTS MEASUREMENT MANAGEMENT



The assumptions that we develop as part of the outreach calculations are used to determine outreach and impact projections. The projections will determine the actual number of poor farmers the intervention is likely to impact. These projections will be used in the development of the ISD, which is the key monitoring and evaluation tool used by the Results Measurement and Learning (RML) team once an intervention has been approved.

IMPROVEMENTS IN THE OUTREACH AND IMPACT PROJECTION CALCULATIONS



The revised calculation sheets represent an improvement in the previous business calculations used by PRISMA. The advantage of doing more detailed projections at an early stage is that:

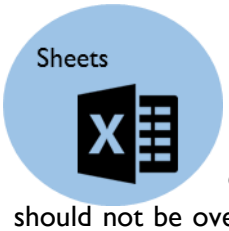
- It provides accurate information on which to develop a more comprehensive market strategy, including for scale-up
- It provides a more realistic basis for the intervention design and ensures better use of available resources
- It helps calculate the business incentive for prospective partners by showing potential outreach, rather than just purchasing power. This in turn assists PRISMA staff in the deal-making process by providing more comprehensive and realistic data
- It also provides a basis for determining overall value for money on which to make a yes/no decision for an intervention can be made.

UPDATING THE CALCULATION SHEETS

The Sector and Portfolio team, under the direction of the Intervention Leader, will be responsible for populating the calculation sheets during the intervention design phase. The gatekeeper for the calculation sheet template is the RML team. Any changes to the template must be approved by the RML team.

The following section provides detailed directions to the Sector and Portfolio teams on how to use the calculation sheets.

HOW TO USE THE CALCULATION SHEETS



The calculations sheets are produced in Excel and are sequentially presented. Staff should only enter data into cells that are colored YELLOW. All other cells will be automatically generated and should not be over-written. In some of the spreadsheets there are hidden comments to provide further guidance for filling in the sheet.

The following section provides guidance on how to populate the individual sheets. The main data entry sheet is the projection sheet.

PROJECTION SHEET

Step 1. Determine the duration of the pilot phase and insert the total number of months for the production cycle in line 3 in the orange section.

Step 2. Fill in the relevant data related to the number of districts, sub districts, farmers, PSPs and ISPs in columns D to Column K.

- Column D: The total number of districts during the pilot phase only
- Column E: Name of the individual districts
- Column F: Number of farmers in the district taken from the GSD
- Column G: The number of sub-districts in the pilot phase only
- Column H: The name of the sub-districts
- Column I: The number of PSPs engaged during the pilot program in the pilot phase only
- Column J: The name of the PSP (legal)
- Column K: The number of ISP that the PSP involves in the pilot program in the first production cycle (or the pilot phase). In other words, there is a business agreement between the PSP and the ISP in accordance with the Results Chain.

Step 3. Determine the projections and enter these into Column L to V for those cells coloured yellow.

- Column L: The total percentage of ISPs that are partnered with the PSP that you anticipate will be active (in other words they will promote the product, sell the product etc.). Your estimate could come from field experience and interviews with the PSP and ISPs. You must note the source of your assumption in the Indicator Table.

Tips on recording the source data

The source of data for all projection assumptions must be noted in the Indicator Table, which forms part of the IP PowerPoint presentation workbook. As well as the Indicator Table the IP PowerPoint presentation workbook includes the Business Model and the Results Chain.

The source of the projection assumptions should also be included in the ISD worksheets at a later date.

You should ensure that the assumptions used in the projection sheets are consistent across all the worksheets.

- Column M: Automatically generated
- Column N: The average number of farmers who will get information from the ISP. For example, the number of farmers who will visit the demonstration plot, who will go to the ISP's kiosk/shop. This must exclude farmers that are reached through mass media, such as radio advertisements, posters etc.).
- Column O: Automatically generated
- Column P: The total number of farmers who get information (from column N) who then purchase the product from the active PSPs. This information can be sought based on the experience of PSPs and ISPs.
- Column Q: Automatically generated
- Column R: Total number of farmers who apply the product. This is called the competitiveness and will be linked to a table in the semester report. This information can be sought from interviews and experience in the field. The source of your data must be noted in the Indicator Table.
- Column S: Automatically generated
- Column T: The total number of farmers you anticipate will receive an increased income. You must note the source of your data in the Indicator Table.
- Column U: Automatically generated
- Column V: The total outreach of poor. This data will come from the PPI and should be based on the 150% National Likelihood.
- Column W & X: Automatically generated

If the pilot period goes over more than one production cycle, you do not need to re-input the number of farmers and ISPs reached. You only need to include any new famers or ISP reached during the second production cycle.

Step 4. Now you fill in the data for the scale-up period against the relevant production cycle. The choice between 2.1, 2.2 and 2.3 will depend on the scale-up strategy in your business model. The difference between 2.2 and 2.3 is the size of the partner. For example a higher leverage partner would be a national PSP.

SUMMARY PROJECTION

For each of the production cycles (1 through to 4) you must input the total number of months for that particular production cycle (for example 6 months) and then indicate which months this cycle commences and ends (for example June to December) and the relevant year.

All the remaining data will be automatically generated from the Projection sheet.

SUMMARY KEY INDICATORS

The data in this sheet will be automatically generated.

TOTAL SECTOR BUSINESS VOLUME

Step 1. Insert the data for productivity gains against the yellow cells in line 4. Productivity gains is the estimated gain in productivity that was included in the GSD. This should be based on the economic assumptions you developed as part of your Business Model. The source of this data must be recorded in the economic assumptions in the Indicator Table (refer to the tip box).

Step 2. Input the data for the average size plot against the yellow cells in line 8. If the intervention is for livestock then this needs to be adjusted to read "total number of livestock".

Step 3. Input the data for the potential area for expansion against the yellow cells in line 9. The source of this assumption needs to be recorded in the Indicator Table.

Step 4. Input data for current productivity in the yellow cells in line 11. This data should have been included in the GSD.

Step 5. Input the data for the average selling price against the yellow cells in line 23. The average selling price should have been calculated as part of the GSD and we assume that the selling price remains stable for the purposes of these calculations.

All the remaining data in this table will be automatically generated.

MARKET FOR INTERVENTION

This table is automatically generated.

The second table in this sheet will be inserted in the GSD Chapter 5.

The third table in this sheet will be included in the Intervention Plan PowerPoint presentation.

KEY BUSINESS INDICATORS

This table is automatically generated

SUMMARY OF PROFIT

This table is automatically generated

FARMER PROFIT

Step 1. In line 2 fill in the relevant data including the sub-sector name and the units to be used.

Step 2. Fill in the income data for the relevant commodity based on sales (for example: sale of peanuts with the units being kilograms and the rate being Rp.10,000). Please note that you must choose the units based on per year or per plot size or per season. This should be noted in Step 1.

Step 3. Fill in the expense data for the relevant commodity.

Tips:

For this table it may be necessary to create additional background calculation sheets. These sheets should be attached to the end of this workbook and linked to this worksheet where possible.

ISP BUSINESS

Step 1. You need to determine the profit unit (per season or per year) and insert this into the blue line. The unit used should be linked to the sales and purchase assumptions.

Step 2. Fill in the sales data with the yellow cells

Step 3. Fill in the expense data with the yellow cells

For this table it may be necessary to create additional background calculation sheets. These sheets should be attached to the end of this workbook and linked to this worksheet, where possible.

PSP BUSINESS

Step 1. You need to determine the profit unit (per season or per year) and insert this into the blue line. The unit used should be linked to the sales and purchase assumptions.

Step 2. Fill in the income data with yellow cells.

Step 3. Fill in the expense data with yellow cells

Tips:

For this table it may be necessary to create additional background calculation sheets. These sheets should be attached to the end of this workbook and linked to this worksheet where possible.

SUMMARY OF INVESTMENT

This information will come from the detailed budget that is developed for the intervention (refer to the budget template on the J Drive). The summary will be different for PRISMA and the Co-Facilitator as the Co-Facilitator will be using a grant budget template.

The following section provides examples of filled-in calculation sheets to assist staff when doing their own projections. It should be noted that all interventions are slightly different and therefore the description of items will need to be changed based on the particular business model and sector.
The calculation sheets presented here are for a cattle fattening intervention and are provided for demonstration purposes only.

Projection Sheet (pilot period)

No	Phase	Production cycle 1 and 2 (Agustus 2015 to April 2016)																			
		# Districts	Name of Districts	# Farmers in the district	# Sub-district	Name of Sub-Districts	# PSP	Name of PSP	# ISP	# Active ISP		Avg. # farmers get info per active ISP	Total # farmers get info from all active ISP (Access)	Total # farmers purchase from all active ISP		Total # farmers apply (Competitiveness)		Total # outreach farmers increased income		Total # outreach poor farmers		% Total farmers in district/ area
										%	#			%	#	%	#	%	#	%	#	
1	Test/confirm the Business Model	3	Lobar	20,198	1	Batu Layar	1	PT. Bintang Pribumi Tulen	2	100%	2	200	400	30%	120	50%	60	60%	36	40.4%	15	0.18%
					1	Gunung Sari			2	100%	2	300	600	30%	180	50%	90	60%	54	40.4%	22	0.27%
			Loteng	39,812	1	Kopang			2	100%	2	300	600	30%	180	50%	90	60%	54	40.4%	22	0.14%
					1	Pringgarata			2	100%	2	300	600	30%	180	50%	90	60%	54	40.4%	22	0.14%
			Lotim	32,135	1	Masbagik			2	100%	2	300	600	30%	180	50%	90	60%	54	40.4%	22	0.17%
					1	Suralaga			2	100%	2	350	700	30%	210	50%	105	60%	63	40.4%	26	0.20%
					1	Aikmel			2	100%	2	300	600	30%	180	50%	90	60%	54	40.4%	22	0.17%

Projection Sheet (Scale up period production cycle 3-4)

Production cycle 3 and 4 (May 2016 to December 2016)																				
# Districts	Name of Districts	# Farmers in the district	# Sub-district	Name of Sub-districts	# PSP	Name of PSP	# ISP	# Active ISP		Avg. # farmers get info per active ISP	Total # farmers get info from all active ISP (Access)	Total # farmers purchase from all active ISP		Total # farmers apply (Competitiveness)		Total # outreach farmers increased income		Total # outreach poor farmers		% Total farmers in district/ area
								%	#			%	#	%	#	%	#	%	#	
3	Lobar	20,198	1	Batu Layar	1	PT. Bintang Pribumi Tulen	2	100%	2	215	430	30%	129	50%	65	60%	39	40.4%	16	0.19%
			1	Gunung Sari			2	100%	2	280	560	30%	168	50%	84	60%	51	40.4%	21	0.25%
			1	Lingsar			2	100%	2	415	830	30%	249	50%	125	60%	75	40.4%	31	0.37%
	Loteng	39,812	1	Kopang			2	100%	2	350	700	30%	210	50%	105	60%	63	40.4%	26	0.16%
			1	Pringgarata			2	100%	2	400	800	30%	240	50%	120	60%	72	40.4%	30	0.18%
			1	Jonggat			2	100%	2	350	700	30%	210	50%	105	60%	63	40.4%	26	0.16%
	Lotim	32,135	1	Masbagik			2	100%	2	300	600	30%	180	50%	90	60%	54	40.4%	22	0.17%
			1	Suralaga			2	100%	2	300	600	30%	180	50%	90	60%	54	40.4%	22	0.17%
			1	Aikmel			2	100%	2	300	600	30%	180	50%	90	60%	54	40.4%	22	0.17%
			1	Keruak			2	100%	2	300	600	30%	180	50%	90	60%	54	40.4%	22	0.17%
			1	Sakra			2	100%	2	300	600	30%	180	50%	90	60%	54	40.4%	22	0.17%

Projection Sheet (Scale up period production cycle 5-7)

Production cycle 5, 6 and 7 (January 2017 to December 2017)																				
# Districts	Name of Districts	# Farmers in the district	# Sub-district	Name of Sub-districts	# PSP	Name of PSP	# ISP	# Active ISP		Avg. # farmers get info per active ISP	Total # farmers get info from all active ISP (Access)	Total # farmers purchase from all active ISP		Total # farmers apply (Competitiveness)		Total # outreach farmers increased income		Total # outreach poor farmers		% Total farmers in district/ area
								%	#			%	#	%	#	%	#	%	#	
4	Lobar	20,198	1	Gerung	1	PT. Bintang Pribumi Tulen	2	100%	2	300	600	40%	240	60%	144	70%	101	40.4%	41	0.50%
			1	Kediri			2	100%	2	300	600	40%	240	60%	144	70%	101	40.4%	41	0.50%
			1	Lingsar			2	100%	2	415	830	40%	332	60%	200	70%	140	40.4%	57	0.69%
			1	Sekotong			2	100%	2	375	750	40%	300	60%	180	70%	126	40.4%	51	0.62%
	Loteng	39,812	1	Pujut			2	100%	2	450	900	40%	360	60%	216	70%	152	40.4%	62	0.38%
			1	Praya Barat			2	100%	2	250	500	40%	200	60%	120	70%	84	40.4%	34	0.21%
			1	Jonggat			2	100%	2	500	1,000	40%	400	60%	240	70%	168	40.4%	68	0.42%
			1	Janapriya			2	100%	2	450	900	40%	360	60%	216	70%	152	40.4%	62	0.38%
			1	Praya Tengah			2	100%	2	350	700	40%	280	60%	168	70%	118	40.4%	48	0.30%
			1	Praya Barat Daya			2	100%	2	350	700	40%	280	60%	168	70%	118	40.4%	48	0.30%
			1	Batukliang Utara			2	100%	2	450	900	40%	360	60%	216	70%	152	40.4%	62	0.38%
	Lotim	32,135	1	Keruak			2	100%	2	300	600	40%	240	60%	144	70%	101	40.4%	41	0.31%
			1	Sakra			2	100%	2	300	600	40%	240	60%	144	70%	101	40.4%	41	0.31%
			1	Terara			2	100%	2	300	600	40%	240	60%	144	70%	101	40.4%	41	0.31%
			1	Sikur			2	100%	2	300	600	40%	240	60%	144	70%	101	40.4%	41	0.31%
			1	Sukamulia			2	100%	2	300	600	40%	240	60%	144	70%	101	40.4%	41	0.31%
			1	Sambelia			2	100%	2	300	600	40%	240	60%	144	70%	101	40.4%	41	0.31%
			1	Montong Gading			2	100%	2	300	600	40%	240	60%	144	70%	101	40.4%	41	0.31%
			1	Pringgasela			2	100%	2	300	600	40%	240	60%	144	70%	101	40.4%	41	0.31%
			1	Wanasaba			2	100%	2	300	600	40%	240	60%	144	70%	101	40.4%	41	0.31%
			1	Sakra Timur			2	100%	2	300	600	40%	240	60%	144	70%	101	40.4%	41	0.31%
			1	Sakra Barat			2	100%	2	300	600	40%	240	60%	144	70%	101	40.4%	41	0.31%
	KLU	19,830	1	Gangga			3	100%	3	550	1,650	40%	660	60%	396	70%	278	40.4%	113	1.40%
			1	Pemenang			3	100%	3	450	1,350	40%	540	60%	324	70%	227	40.4%	92	1.14%

Projection Sheet (scale-up period production cycle 8-10)

Production cycle 8, 9 and 10 (January 2018 to December 2018)																			
# Districts	Name of District	# Farmers in the district	# Sub-district	Name of Sub-districts	# PSP	Name of PSP	# ISP	# Active ISP		Avg. # farmers get info per active ISP	Total # farmers get info from all active ISP (Access)	Total # farmers purchase from all active ISP		Total # farmers apply (Competitiveness)		Total # outreach farmers increased income		Total # outreach poor farmers		% Total farmers in district/ area
								%	#			%	#	%	#	%	#	%	#	
4	Lobar	20,198	1	Gerung	1	PT. Bintang Pribumi Tulen	2	100%	2	300	600	50%	300	70%	210	80%	168	40.4%	68	0.83%
			1	Kediri			2	100%	2	300	600	50%	300	70%	210	80%	168	40.4%	68	0.83%
			1	Lembar			2	100%	2	330	660	50%	330	70%	231	80%	185	40.4%	75	0.92%
			1	Sekotong			2	100%	2	375	750	50%	375	70%	263	80%	211	40.4%	86	1.04%
			1	Labuapi			2	100%	2	375	750	50%	375	70%	263	80%	211	40.4%	86	1.04%
			1	Kuripan			2	100%	2	330	660	50%	330	70%	231	80%	185	40.4%	75	0.92%
	Loteng	39,812	1	Batukliang			3	100%	3	460	1,380	50%	690	70%	483	80%	387	40.4%	157	0.97%
			1	Pujut			2	100%	2	450	900	50%	450	70%	315	80%	252	40.4%	102	0.63%
			1	Praya Barat			2	100%	2	250	500	50%	250	70%	175	80%	140	40.4%	57	0.35%
			1	Praya Timur			2	100%	2	250	500	50%	250	70%	175	80%	140	40.4%	57	0.35%
			1	Janapriya			2	100%	2	450	900	50%	450	70%	315	80%	252	40.4%	102	0.63%
			1	Praya Tengah			2	100%	2	350	700	50%	350	70%	245	80%	196	40.4%	80	0.49%
			1	Praya Barat Daya			2	100%	2	350	700	50%	350	70%	245	80%	196	40.4%	80	0.49%
			1	Batukliang Utara			2	100%	2	450	900	50%	450	70%	315	80%	252	40.4%	102	0.63%
	Lotim	32,135	1	Pringgabaya			2	100%	2	300	600	50%	300	70%	210	80%	168	40.4%	68	0.52%
			1	Sambelia			2	100%	2	300	600	50%	300	70%	210	80%	168	40.4%	68	0.52%
			1	Montong Gading			2	100%	2	300	600	50%	300	70%	210	80%	168	40.4%	68	0.52%
			1	Pringgasela			2	100%	2	300	600	50%	300	70%	210	80%	168	40.4%	68	0.52%
			1	Wanasaba			2	100%	2	300	600	50%	300	70%	210	80%	168	40.4%	68	0.52%
			1	Sakra Timur			2	100%	2	300	600	50%	300	70%	210	80%	168	40.4%	68	0.52%
			1	Sakra Barat			2	100%	2	300	600	50%	300	70%	210	80%	168	40.4%	68	0.52%
			1	Jerowaru			2	100%	2	300	600	50%	300	70%	210	80%	168	40.4%	68	0.52%
	KLU	19,830	1	Gangga			2	100%	2	550	1,100	50%	550	70%	385	80%	308	40.4%	125	1.55%
			1	Pemenang			2	100%	2	450	900	50%	450	70%	315	80%	252	40.4%	102	1.27%

Summary Production Sheet

August 2015 - April 2016 (8 months; Cycle 1 and 2)

No	Phase	# District	# Farmers in District	# Sub-district	# PSP	# ISP	# Active ISP	# Farmers HH Accessing Change	# Farmers HH Competitiveness Change	# Outreach Farmers HH	# Outreach Poor Farmers HH
1	Pilot/confirm the Business Model	3	92,145	7	1	14	14	4,100	615	369	151
Scale up											
2	Replication (Same Partner)	-	-	-	-	-	-	-	-	-	-
2	Replication (Different Partner)	-	-	-	-	-	-	-	-	-	-
2	Replication (Leverage Partner)	-	-	-	-	-	-	-	-	-	-
	TOTAL	**3**	**92,145**	**7**	**1**	**14**	**14**	**4,100**	**615**	**369**	**151**

May 2016 - December 2016 (8 months; Cycle 3 and 4)

No	Phase	# District	# Farmers in District	# Sub-district	# PSP	# ISP	# Active ISP	# Farmers HH Accessing Change	# Farmers HH Competitiveness Change	# Outreach Farmers HH	# Outreach Poor Farmers HH
1	Pilot/confirm the Business Model	-	-	-	-	-	-	-	-	-	-
Scale up											
2	Replication (Same Partner)	3	92,145	11	1	22	22	7,020	1,054	633	260
2	Replication (Different Partner)	-	-	-	-	-	-	-	-	-	-
2	Replication (Leverage Partner)	-	-	-	-	-	-	-	-	-	-
	TOTAL	**3**	**92,145**	**11**	**1**	**22**	**22**	**7,020**	**1,054**	**633**	**260**
	Cummulative Outreach					**36**	**36**	**11,120**	**1,669**	**1,002**	**411**

January - December 2017 (12 months; Cycle 5, 6 and 7)

No	Phase	# District	# Farmers in District	# Sub-district	# PSP	# ISP	# Active ISP	# Farmers HH Accessing Change	# Farmers HH Competitiveness Change	# Outreach Farmers HH	# Outreach Poor Farmers HH
1	Pilot/confirm the Business Model	-	-	-	-	-	-	-	-	-	-
Scale up											
2	Replication (Same Partner)	4	111,974	24	1	50	50	17,980	4,316	3,028	1,230
2	Replication (Different Partner)	-	-	-	-	-	-	-	-	-	-
2	Replication (Leverage Partner)	-	-	-	-	-	-	-	-	-	-
	TOTAL	**4**	**111,974**	**24**	**1**	**50**	**50**	**17,980**	**4,316**	**3,028**	**1,230**
	Cummulative Outreach					**86**	**86**	**29,100**	**5,985**	**4,030**	**1,641**

January - December 2018 (12 months; Cycle 8, 9 and 10)

No	Phase	# District	# Farmers in District	# Sub-district	# PSP	# ISP	# Active ISP	# Farmers HH Accessing Change	# Farmers HH Competitiveness Change	# Outreach Farmers HH	# Outreach Poor Farmers HH
1	Pilot/confirm the Business Model	-	-	-	-	-	-	-	-	-	-
Scale up											
2	Replication (Same Partner)	4	111,974	27	1	55	55	19,800	6,931	5,547	2,250
2	Replication (Different Partner)	-	-	-	-	-	-	-	-	-	-
2	Replication (Leverage Partner)	-	-	-	-	-	-	-	-	-	-
	TOTAL	**4**	**111,974**	**27**	**1**	**55**	**55**	**19,800**	**6,931**	**5,547**	**2,250**
	Cummulative Outreach					**141**	**141**	**48,900**	**12,916**	**9,577**	**3,891**

Summary Key Indicators

Summary Key Indicators				
	Production cycle 1 and 2 Aug 2015 - Apr 2016	Production cycle 3 and 4 May - Dec 2016	Production cycle 5 to 7 2017	Production cycle 8 to 10 2018
Cummulative Small-holder outreach (poor	151	411	1,641	3,891
Cummulative Outreach	369	1,002	4,030	9,577
Outreach	369	633	3,028	5,547
Access (Receive Information)	4,100	11,120	29,100	48,900
# of Active ISP	14	36	86	141
Estimated Turnover of ISP	5,131,280,000	13,394,640,000	47,063,640,000	97,468,192,000
# of Partners	1	1	1	1
Estimated Turnover of partners	4,817,120,000	12,574,560,000	44,182,200,000	91,500,760,000

Total Sector Business Volume

Description/Years	Total Business in the target area (s)	Upto 2016	Upto 2018
Productivity Gains (kg)	27%	27%	27%
Number of farmers	111,974	1,002	9,577
Production Information			
Estimated current number of cattles owned and sold per year	111,974	3,006	28,731
Average number of cattles owned and sold per year	1	3	3
Potential number of cattles owned and sold for expansion	3	5	5
Productivity			
Current productivity (initial weight of calf purchased in kg)	224	224	224
Potential productivity (weight in kg)	284	284	284
Increased Productivity (weight in kg)	60	60	60
Potential Production			
Existing Production (kg)	25,082,266	673,344	6,435,744
Potential New Production in Existing No. of Cattles (kg)	6,718,464	180,360	1,723,860
Potential New Production in New Expanded No. of Cattles (kg)	13,436,928	120,240	1,149,240
Total Potential Production (kg)	**45,237,658**	**973,944**	**9,308,844**

Market/Production Value			
Average Beef Selling price per kg (IDR)	36,000	36,000	36,000
Current Value of Production (million IDR)	**902,962**	**24,240**	**231,687**
Total value of potential production (million IDR)	1,628,556	35,062	335,118
Total value of potential production (AUD)	**162,855,567**	**3,506,198**	**33,511,838**
Total potential value of increased production (million IDR)	725,594	10,822	103,432
Total potential value of increased production (AUD)	**72,559,411**	**1,082,160**	**10,343,160**
Market share due to program		**1%**	**11%**

Additional Incomes	
Description	
Current Net Income Per Current Farmer	IDR 792,000
Net Income Per Current Farmer after Intervention	**IDR 6,192,000**
Additional Net Income Per Current Farmer	**IDR 5,400,000**
Additional Net Income Per Current Farmer (AUD)	**AUD 540**
Increase Net Income % per Farmer	682%

	ISP 1 -	ISP 2 -	SSP 3 -
Service Provider Net Additional Income Per Year	**IDR 9,983,112,000**	**IDR 0**	**IDR 0**

	Private Company
Private Sector Partner Net Additional Income Per Year	**IDR 39,134,044,800**

Return on Investments	
Total **Current Net** Income of all farmers Per Year	AUD 8,868,372
3 year Net Income Increase (2016-2018)	AUD 1,623,240
Scale Up Phase: 3 year Net Income Increase (2016-2018)	AUD 15,514,740
Testing and Replication Investments (PRISMA)	AUD 0
ROI (cumulative 3 years)	**Total Sector**
Per Farmer Investment (Pilot Phase)	AUD 0

Market for Intervention

Description/Years	Total Business in the target area (s)		
	Total	Year 1 (2016)	Year 3 (2018)
Average Selling Price Beef per kg (IDR)	36,000	36,000	36,000
Current Value of Production (million IDR)	902,962	24,240	231,687
Total value of potential production (million IDR)	1,628,556	35,062	335,118
Total value of potential production (AUD)	162,855,567	3,506,198	33,511,838
Total potential value of increased production (million IDR)	725,594	10,822	103,432
Total potential value of increased production (AUD)	72,559,411	1,082,160	10,343,160
Market share due to program		**1%**	**11%**

Description/Years	Total Business in the target area (s)
Existing Production (kg)	25,082,266
Potential New Production in Existing Areas (kg)	6,718,464
Total Potential Production (kg)	31,800,730
Average Selling Price Beef per kg (IDR)	36,000
Current Value of Production (million IDR)	902,961.56
Total value of potential production (million IDR)	1,628,556
Total value of potential production (AUD)	162,855,567
Total potential value of increased production (million IDR)	725,594
Total potential value of increased production (AUD)	72,559,411

Description	Current	After intervention (Year 2018)	% Changes (where relevant)
Productivity (weight in kg)	224	284	27%
Number of cattles owned and sold per year	1	3	200%
Expenses per Farmer	9,000,000	24,480,000	172%
Incomes per Farmer	9,792,000	30,672,000	213%

Key Business Indicators

Key Financial Indicators Table (KFIT)	
	Cattle/ Beef
Total Sector Farmers	111,974
Number of Farmers (Upto 2016)	1,002
Number of Farmers (Upto 2018)	9,577
Increased Productivity	27%
PRISMA Investments (Upto 2016)	
Total	AUD 0
Per Farmer	AUD 0
Returns to PRISMA	
Total Net Additional Income for Farmers (3 years)	AUD 1,623,240
ROI (cumulative 3 years)*	Total Sector
Income/Profit	
Farmer	
Net Additional Income Per Year Per Farmer	AUD 540
Increase in Net Additional Income	682%
Intermediary Service Provider 1	**e.g. Agent**
Gross Profit for 4 Years	AUD 998,311
Increase in Net Additional Income	#DIV/0!
Private Sector Partner	**Private Company**
Gross Profit for 4 Years	AUD 3,913,404
Key Business	#DIV/0!

* The ROI is calculated on the basis of 3 year gain of the farmers, 1 year during the intervention and 2 years after the intervention. The attribution factor is not calculated here

Summary of Profits

Summary of Profits	Before Intervention (IDR)			After Intervention (IDR)			NAI (IDR)	Profit %	Increase Profit %
	Income	Expense	Profit	Income	Expense	Profit			
Farmers	9,792,000	9,000,000	792,000	30,672,000	24,480,000	6,192,000	5,400,000	20%	682%
ISP (apprx. 141 ISPs)	0	-	0	163,057,752,000	153,074,640,000	9,983,112,000	9,983,112,000	6%	#DIV/0!
Private Company	0	-	0	153,074,640,000	113,940,595,200	39,134,044,800	39,134,044,800	26%	#DIV/0!

Farmer Profit

Business Calculation for Cattle/ Beef - Farmer - Per Year						
	Before Intervention			After Intervention		
Income						
	Unit	Rate	Total	Unit	Rate	Total
Sales of Cattle/ Beef (kg)	272	36,000	9,792,000	284	36,000	10,224,000
			-	284	36,000	10,224,000
			-	284	36,000	10,224,000
Total			**9,792,000**			**30,672,000**
Expenses						
	Unit	Rate	Total	Unit	Rate	Total
Cattle/ Beef						
Calf	200	36,000	7,200,000	200	36,000	7,200,000
			-	200	36,000	7,200,000
			-	200	36,000	7,200,000
Grass fodder	360	5,000	1,800,000			-
Concentrate Feed 3 kg			-	360	8,000	2,880,000
			-			-
			-			-
			-			-
			-			-
			-			-
			-			-
Total			**9,000,000**			**24,480,000**
Profits/Net Income			792,000			6,192,000
Increased Gross Income						20,880,000
Increased Net Income						5,400,000
Profit per unit			2,912			21,803

PSP Business

Profit Estimation of PT. Bintang Pribumi Tulen - 4 years						
	Before Intervention			After Intervention		
Income						
	Unit	Rate	Total	Unit (kg)	Rate (IDR)	Total
Sales of Fermented Feed 5 kg	-	-	-	6,655,920	6,000	39,935,520,000
Sales of Concentrate Feed 3 kg	-	-	-	7,985,568	7,500	59,891,760,000
Sales of Concentrate Feed 4 kg	-	-	-	5,324,736	10,000	53,247,360,000
Total			-			153,074,640,000
Expenses (Operational and Promotional Cost are excluded)						
	Unit	Rate	Total	Unit (kg)	Rate (IDR)	Total
Production cost of Fermented Feed 5 kg	-	-	-	6,655,920	4,200	27,954,864,000
Production cost of Concentrate Feed 3 kg	-	-	-	7,985,568	5,700	45,517,737,600
Production cost of Concentrate Feed 4 kg	-	-	-	5,324,736	7,600	40,467,993,600
Total			-			113,940,595,200
Profits (IDR)			-			39,134,044,800

ISP Business

Profitability of Intermediary Service Provider - Approximately 141 Agents - 4 Years						
	Before Intervention			After Intervention		
Income (Sales Turnover)						
	Unit	Rate	Total	Unit	Rate (IDR)	Total
Sales of Fermented Feed 5 kg			-	6,655,920	6,500	43,263,480,000
Sales of Concentrate Feed 3 kg			-	7,985,568	8,000	63,884,544,000
Sales of Concentrate Feed 4 kg			-	5,324,736	10,500	55,909,728,000
Total			-			163,057,752,000
Expenses (Operational and Promotional Cost are excluded)						
	Unit	Rate	Total	Unit	Rate (IDR)	Total
Purchase of Fermented Feed 5 kg	-	-	-	6,655,920	6,000	39,935,520,000
Purchase of Concentrate Feed 3 kg			-	7,985,568	7,500	59,891,760,000
Purchase of Concentrate Feed 4 kg			-	5,324,736	10,000	53,247,360,000
Total			-			153,074,640,000
Profits			-			9,983,112,000
Number of ISP			141			70,802,300
Profitability of Intermediary Service Provider2 - xxxxxx - per season						

Examples of Assumption Calculations

These are examples of additional calculation sheets that have been made as part of the assumptions for this intervention. These should be created as required per intervention and attached to the Projection Sheet and Business Calculations workbook template.

Assumptions

Calf	200	kg
Fattening		
Grass fodder	0.2	kg/day
Fermented 5 kg	0.5	kg/day
Concentrate 3 kg	0.7	kg/day
Concentrate 4 kg	1	kg/day
Fattening days		
Traditional	12	months
Commercial Feed	4	months
No. of days/month	30	

Weight Increase in 4 months (in Kg)		
Traditional	24	12%
Commercial Feed (Concentrate Feed 3 kg)	84	42%
Net weight increase	60	27%

Assumptions (sales and purchase)

No. of purchasing days (Regular Buyer)	120
No. of purchasing days (Irregular Buyer)	4
Average no. of cattles per farmer	1
% Repeat Y2	90%
% Repeat Y3-4	100%

Feed Package

	Kg	% Farmers purchase	Selling Price PSP	Selling Price ISP	Weight Increase (kg)
Package 1 (Fermented, 5 kg)	5	25%	6,000	6,500	0.5
Package 2 (Concentrate, 3 kg)	3	50%	7,500	8,000	0.7
Package 3 (Concentrate, 4 kg)	4	25%	10,000	10,500	1

	2015		2016		2017		2018	
No of production cycle		2		2		3		3
No of month		8		8		12		12
# Farmers purchase		1,230		2,106		7,192		9,900
	% Irregular	% Regular	% Irregular	% Regular	% Irregular	% Regular	% Irregular	% Regular
Frequency of purchase	50%	50%	50%	50%	40%	60%	30%	70%
# Farmers purchase (frequent based)	615	615	1,053	1,053	2,877	4,316	2,970	6,930
			554	554	554	554	554	554
					948	948	948	948
							2,590	3,885
Sub-total # Farmers purchase (frequent based)	615	615	1,607	1,607	4,379	5,818	7,062	12,317
Total # Farmers purchase (frequent based)		**1,230**		**3,214**		**10,197**		**19,379**

Feed Production	2015		2016		2017		2018	
Fermented 5 kg	24,640	184,800	64,320	482,400	175,200	1,746,000	282,560	3,696,000
Fermented in kg		**209,440**		**546,720**		**1,921,200**		**3,978,560**
Concentrate 3 kg	29,568	221,760	77,184	578,880	210,240	2,094,480	338,976	4,434,480
Concentrate 4 kg	19,712	147,840	51,456	385,920	140,160	1,396,800	226,048	2,956,800
Concentrate in kg		**418,880**		**1,093,440**		**3,841,680**		**7,956,304**

Turnover

Turnover PSP	2015	2016	2017	2018
Fermented	1,256,640,000	3,280,320,000	11,527,200,000	23,871,360,000
Concentrate	3,560,480,000	9,294,240,000	32,655,000,000	67,629,400,000
Total Turnover	**4,817,120,000**	**12,574,560,000**	**44,182,200,000**	**91,500,760,000**

Turnover ISP	2015	2016	2017	2018
Fermented	1,361,360,000	3,553,680,000	12,487,800,000	25,860,640,000
Concentrate	3,769,920,000	9,840,960,000	34,575,840,000	71,607,552,000
Total Turnover	**5,131,280,000**	**13,394,640,000**	**47,063,640,000**	**97,468,192,000**

Cost Calculation of Fermented Feed Formula

No	Description	Price (Rp.)
1	Maize Cobs	24,000
2	Maize Bran 50 kg	24,000
3	Rice Bran 50 kg	75,000
4	Salt 5 kg	5,000
5	SBP 1 liter	50,000
6	Molasses 90 litre	100,000
7	Transportation Cost of Maize Cobs 500 kg	125,000
8	Labour Cost	100,000
9	Plastic Bag	500
	Total Cost	503,500
	Total Production (in Kg)	600
	Production Cost / Kg	**839**
	Consumption Need per Cattle per Day (in Kg)	5
	Production Cost for 5 Kg package	**4,200**
	Expected Gross Profit	35%
	Estimated Selling Cost for 3 Kg package	5,670
	Rounded up Selling Price for 3 kg package	**6,000**
	Suggested Retail Price	**6,500**

Cost Calculation of Concentrate Feed Formula

No	Description	Composition (Kg)	Price (Rp)	Total Cost (Rp)
1	Rice Bran	30	1,500	45,000
2	Peanut Shell	15	500	7,500
3	Maize Cobs	16	500	8,000
4	Maize	30	2,500	75,000
5	Soy bean	5	7,000	35,000
6	Mineral	1	7,000	7,000
7	Salt	3	1,500	4,500
	Sub Total	**100**		**182,000**
	Production Cost / Kg			1,900
	Production Cost per Cattle for 4 Kg package			5,700
	Production Cost per Cattle for 3 Kg package			7,600
	Expected Gross Profit			35%
	Estimated Selling Cost for 3 Kg package			7,695
	Rounded down Selling Price for 3 kg package			**7,500**
	Estimated Profit of Retailer			500
	Suggested Retail Price			**8,000**
	Estimated Selling Cost for 4 Kg package			10,260
	Rounded down Selling Price for 4 kg package			**10,000**
	Estimated Profit of Retailer			500
	Suggested Retail Price			**10,500**