

# Collection and Systematization of Economic Outcomes at Household Level

*A nine-step guide*



*Salvador, Bahia – January 2019*

 **FIDA**  
Investindo nas populações rurais



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# Table of Contents

Introduction.....	3
Definitions .....	5
Responsible parties .....	7
Step-by-step guide.....	8
Step 1. Key definitions .....	8
Step 2. Tool Design .....	12
Step 3. Sample selection and planning of road map and schedule.....	16
Step 4. Filling of family's worksheets .....	17
Step 5. Data collection (technical level) .....	19
Step 6. Transfer of the information of the tables - Filling of the templates (technical level) .....	22
Step 7. Comparison, Summary and Automation of the Pane .....	23
Step 8. Discussion of results (technical level) .....	23
Step 9. Preparation of reports (technical level) .....	23
Annex - Database .....	24

# Presentation

The **International Fund for Agricultural Development (IFAD)**, in partnership with state governments in the Northeast and with the Federal Government, has a portfolio of rural development projects that today has a framework of six running funding projects, three of them with the support of the **Inter-American Institute for Cooperation on Agriculture (IICA)**.

The Projects Dom Helder Câmara II, Dom Távora (Sergipe), PROCASE (Paraíba), Paulo Freire (Ceará), Viva o Semiárido (Piauí) and Pró-Semiárido (Bahia) compose this diversified portfolio, with wide scope throughout the region of the semi-arid in the northeast region.

In order to increase income, promote food security and reduce the poverty of the beneficiary public in several states in the northeast region, IFAD encourages targeted actions, which prioritizes the involvement of women, youth and traditional communities. Parallel to this work, IFAD seeks to perform actions that go beyond the productive development in the communities served, stimulating access to information through actions focused on knowledge, aiming to facilitate access to knowledge, innovations and good practices contextualized for the coexistence with the semi-arid climate.

Thus, the **Seed Program** was created, which for six years worked with the projects supported by IFAD in promoting sustainable and equitable development in the region. Its success gave rise to a second phase, the **International Seed**, focusing on Monitoring & Evaluation, Communication, Knowledge Management and



South-South Cooperation. More specifically, the PSI focuses on the qualification to monitor and evaluate public policies and rural development programs, including knowledge management and dialogue about public policies to identify best practices and promote them for continuous improvement. Farmers and civil society organizations will participate in the Program's activities, including groups of women, youth and traditional communities, such as indigenous and *quilombola* groups.

Advancing in its execution, IFAD projects in Brazil collected some information regarding the impacts of their actions, mostly related to the analysis of the beneficiary public and financial execution of the actions and business plans. Parallel to this work, IFAD proposed a change regarding the collection of these data, showing the need for specific focus on the economic and financial information of the families and beneficiary communities.

To assist the projects in this initiative and promote a better systematization and understanding of these data, the International Seed Program aims to promote the development of a unique methodology for data collection and systematization of economic data, ideally based on a logical model, easy to communicate and reproduce, which can guarantee better results in the collection processes made by each project.

It was with this interest in mind that the "Workshop for Presentation of Methodologies for Collection and Systematization of Economic

Results of IFAD Projects in Brazil” was organized, on 24 and 25 January 2019, receiving members of various organizations, in addition to the Monitoring & Evaluation areas of IFAD projects in Brazil.

In this opportunity, a collection and systematization exercise of partial results was presented, conducted by the consultant Leandro Bullor. We have gathered the main information of this presentation and elaborated this manual, aiming to facilitate the application of this exercise to the reality of IFAD projects in Brazil, but also aiming at the replication of knowledge about monitoring systems and evaluation within a broader spectrum.

# Introduction



# Introduction

**H**ow many information do we use to make our decisions? How many decisions do we make without the desired information? What decisions can't we make because we do not have information? These **are some questions that indicate the quality of the decisions to be made.**

Can we get answers about the effectiveness or profitability of the actions we perform? How many answers can we give based on the data and information obtained? Do we have any quantitative information on the progress of the results to justify the obtaining of more funding for the projects? How many lessons learned have evidences? **These are other questions to assess our ability of rendering accounts, communicating based on evidences, assessing the project performance, and learning to promote improvement and expansion of policies.**

Often, priorities in financial execution and in making investments neglect the concern about the aforementioned issues. Finding time and resources for monitoring the results during implementation is not easy and its usefulness is not clear to the executors, since an impact assessment to obtain the final results will be conducted. Efforts focus on the progress reports of the Annual Operational Plan (AOP) and the Logical Framework at product level, but there is hardly any evidence of partial performance.

However, a quick, easy and agile exercise of **monitoring of partial economic outcomes at household level**, as a complement to the M&E system of projects, can help in answering some of the aforementioned questions. This exercise may provide new opportunities to implement recommendations and result-based key changes, strategically reorienting the project implementation. In addition, meeting the demands of provision of accounts in a quicker and faster way would be possible, thus allowing presenting evidence to promote public policies for fighting against rural poverty in Brazil.

This handbook seeks to guide the design and implementation of the exercise of monitoring of partial economic outcomes at household level. Its main objective is **to strengthen the current M&E systems, through the production of evidence and the use of the information collected on the partial economic outcomes.** As we will see in the diagram below, meeting the demands for results without affecting financial execution; improving decision-making and communication,

being impartial; and improving employee motivation without overburdening work teams are the challenges and requirements for the design and implementation of this methodology.

## Diagram1. Objectives and challenges

### Strengthening of the new M&E system and use of information



The starting point is to **think of the evidence as a tool for social, economic and institutional transformation in rural areas**, which will be the key factor for promoting, disseminating and expanding public policies to combat poverty in these areas. Without the evidence, the results obtained are not reliable, cannot be visualized and have no potential for expansion.

The main value of the evidence is:

- **More transparent** provision of accounts to all the bodies involved;
- Improvement in the **quality of public management**.
- Improvement in the **quality of public policies**

The handbook presents a nine-step path for designing and implementing the exercise. Its complement is an Excel file with *templates*, examples and possible visualizations from an experience already lived in the project Paulo Freire in Ceará. The basic principle is that the entire exercise can be adapted to the needs, capacities, time and possibilities of each project.

## Definitions

What is an exercise of monitoring of partial economic outcomes at household level? When it comes to monitoring, we are not talking about audits, reviews, inspections, surveys or evaluations. **Monitoring** is the collection, systematization and analysis of the indicator system during the project implementation (in progress). The key factor is the timing and ability to identify progress, deviations and difficulties, when they still can be addressed (to anticipate decisions, to evaluate the performance of partners and to review contracts).

### Tip 1. Begin with the end in mind

What indicators will we want to obtain? What will they be used for? What data do we have to present in the reports or what do we want to report? What are the hypotheses to be verified or the decisions to be made? The first thing to plan in the exercise is the identification of the final indicators and their use. If this is not clear, the exercise itself will not be effective. Much information can be found by performing the exercise, but the indicators expected and their use must guide the planning of its design and its implementation.

When it comes to **outcomes**, we do not talk about impacts, products, processes or inputs, but about the objectives to be achieved through investments. If it is an **economic** outcome, it is linked to incomes, profit margins, sales, value of the output, amounts produced, among others. Effectively, the outcomes cannot be achieved automatically, after the investments have been made and the services have been provided. In some cases, it can take many years to achieve them. However, after a complete production cycle, having received the investments and services, understanding how the products and their orientation or direction were used to obtain the results becomes possible. That is why they are called **partial** outcomes. They can be somewhat close to the expectations and indications or can be distant from them, depending on the context and the productive activity analyzed.

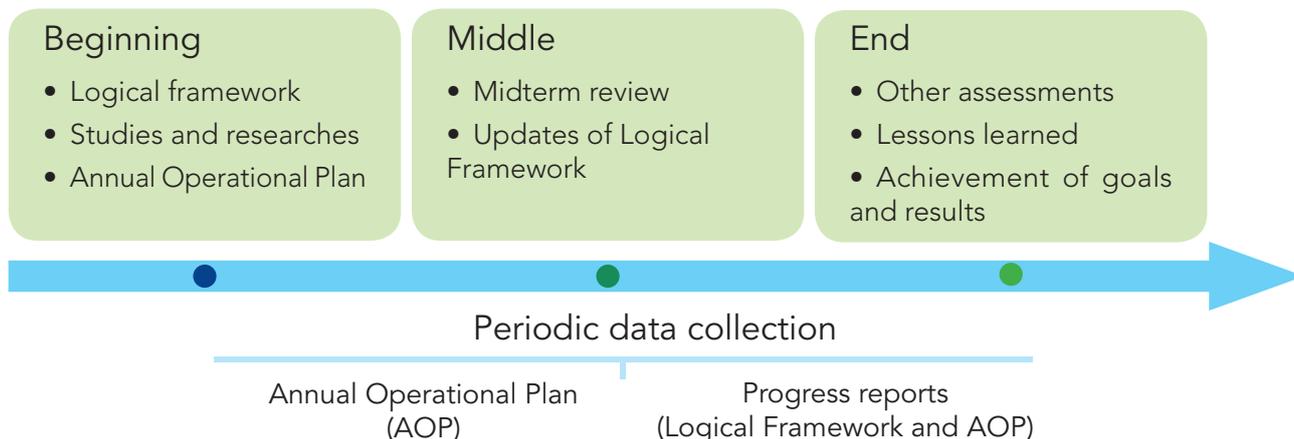
Finally, the **household level** refers to the verifications to be made, specific to each family. In general, the contact of the project with its protagonists relies on intermediary entities, organizations, cooperatives or associations that become the access to the target population easier. However, the value of this exercise is to reach each family directly, which also allows verifying the performance of the intermediaries and their commitment to the achievement of results.

## Diagram 2. Period of the exercise.

### Responsible parties

This handbook was made for project management teams of the IFAD in Brazil, especially for coordination teams and for monitoring and evaluation teams, as

### Monitoring of partial economic outcomes at household level



well as for technical teams interested in obtaining and visualizing outcomes.

For the exercise, identifying a technical coordinator (who can be the M&E leader and a strategic decision maker, ideally the project coordinator) is necessary. Subsequently, its implementation could be made by the project teams in the period planned or with external support, in partnership with implementing entities, universities, organizations, associations or cooperatives.

As mentioned, this handbook has nine steps for design and implementation of the exercise.

### Tip 2. What one needs to know and not what would be “good to know”

Much of the information that can be raised can be used in analyses and researches. However, the exercise has to focus on the specific requirements of information and not on the information without specific utility at the moment of the planning and identification of indicators. Thus resources, time, and energies will not be diverted from the main goal.

Since it will have to adapt to the needs, capacities, time and possibilities of the projects, each project would have a specific design, with solutions to its own demands, decisions and requirements, including the fact of affecting the activities and responsibilities of the projects as little as possible. That is why the criterion of being the simplest possible is important, as mentioned. The families chosen for the exercise need to have at least one complete production cycle after receiving the investments. This can be a constraint to many projects whose execution is very focused on the final years. Thus, the best moment to implement the exercise would be soon after the midterm review, and its frequency may be adapted to the needs for information and to the resources available. An experience will produce evidence and learning to facilitate its replication, and can feed the module as often as desired.

### Step-by-step guide

The handbook includes nine steps that combine moments of strategic definition with moments of technical work. In each case, the parties responsible for technical and strategic aspects will decide the processes, the inputs and the products of the exercise. The adaptation must be made by the projects. This handbook aims to guide the design and implementation of the exercise adapted to each need.

# Step-by-Step Guide



# Step 1. Key definitions

## a. To define the indicators to be seen because of the exercise (graphs, tables, indicators, cross-checking of information)

This, for example, can be defined based on;

- Specific information required by the accountability bodies
- Information that can complete the reports
- Decisions of planning (prioritization of municipalities, activities, etc.)

Both quantifiable and non-quantifiable indicators can be part of the exercise.

- **Quantifiable indicators:** have to be calculated based on the same frequency (month, year, etc.), with the same unit of measure (R\$, kg, etc.) and ideally during the same time period (for those before and after the project).

Examples: monthly profit from the activity before and after the project; family's monthly income; contribution of the activities to income; monthly sales; monthly costs; time devoted.

- **Non-quantifiable indicators:** the outcome can be a specific answer (main uses of profit), one oriented with options (ways of funding of the new production cycle) or one whose answer is YES/NO (substitution of external purchases).

Examples: main uses of the profit from the activity; ways of funding of the new production cycle; substitution of external purchases, etc.

Many key indicators will be calculated only after data collection, and based on the answers given (increase in project income, increase in project profit, increase in the contribution of the activity to family income). Thus, the results will be shown in percentages or average values.

**Unit of analysis:** each type of indicator can have a different unit of analysis. For example, indicators of profit margins, costs or sales will be related to those of the family members who perform a **supported productive activity**. However, the indicators of income, expenses on food or uses of profit from the activity will be related to the set of families that may or may not have different incomes, activities and situations.

**Frequency:** each indicator should identify its frequency (monthly, annual, etc.). In many cases, data can be collected with different frequencies, but it is

important that, at the end, everything is harmonized for the development of the final indicator.

Example of indicators from the exercise performed in the supervision mission of the project Paulo Freire (PPF) in Ceará:

## Indicadores

### Indicadores de resultados econômicos parciais do painel

-  Renda familiar com PI (%)
-  Renda familiar com PI (R\$)
-  Lucro da atividade (%)
-  Lucro da atividade (R\$)
-  Contribuição das atividades na renda (% o pontos)
-  X% das famílias já superam os impactos previstos no *logframe* (30%)
-  Vendas (%)
-  Vendas (R\$)
-  Custos (%)
-  Custos (R\$)
-  Tempo dedicado (%)

### Outros Indicadores do Painel

-  Principais usos do lucro
-  Capacidade de pagar o novo ciclo produtivo
-  Substituiu compras externas de alimento

### Gráficos

- Resultados na renda por atividade (% e R\$)
- Resultados na renda por município (% e R\$)
- Contribuição das atividades na renda por atividade
- Contribuição das atividades na renda por município
- Resultados no lucro por atividade (% e R\$)
- Resultados no lucro por município (% e R\$)

### Tablas

- Ranking dos principais usos do Lucro
- Ranking das atividades mais rentáveis

Figure 1. Definition worksheet of indicators

Example of the indicators of outcomes searched in the exercise:

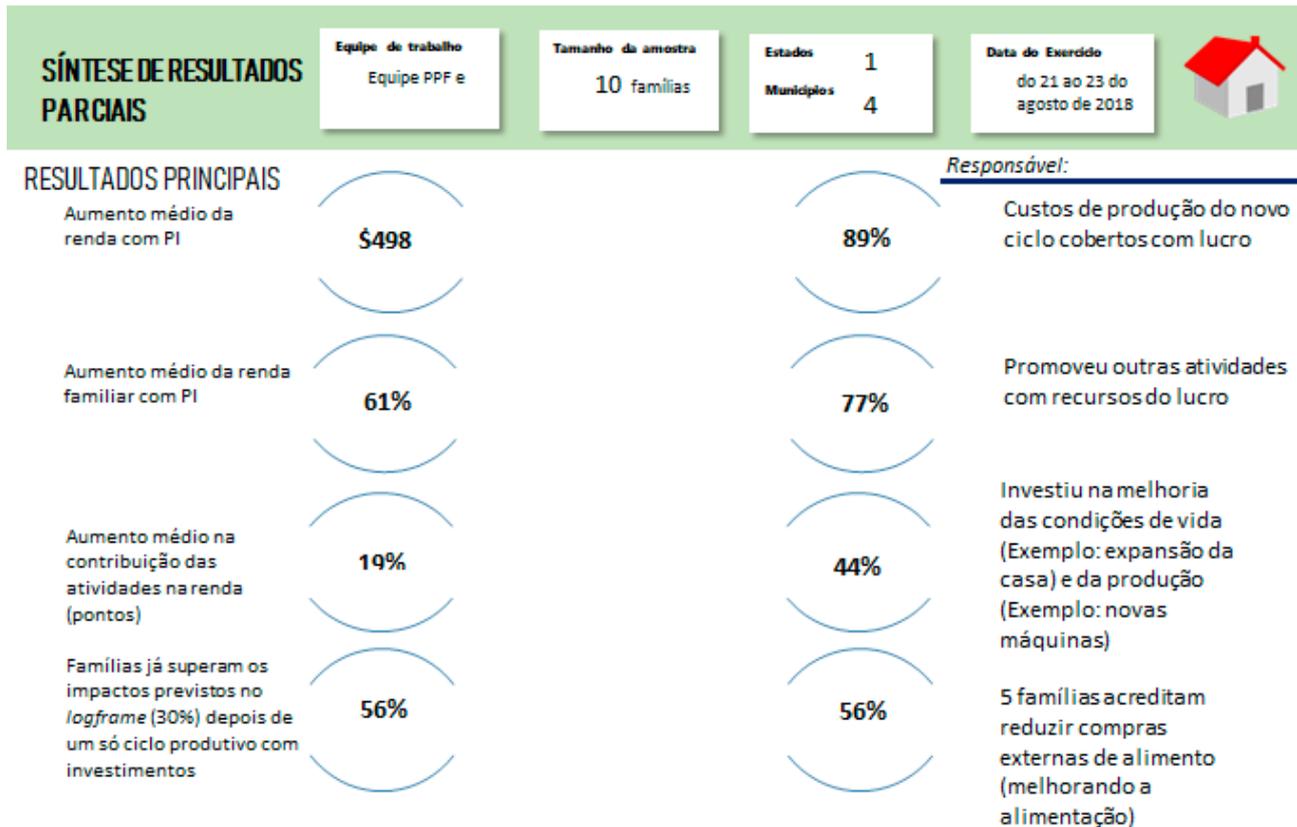
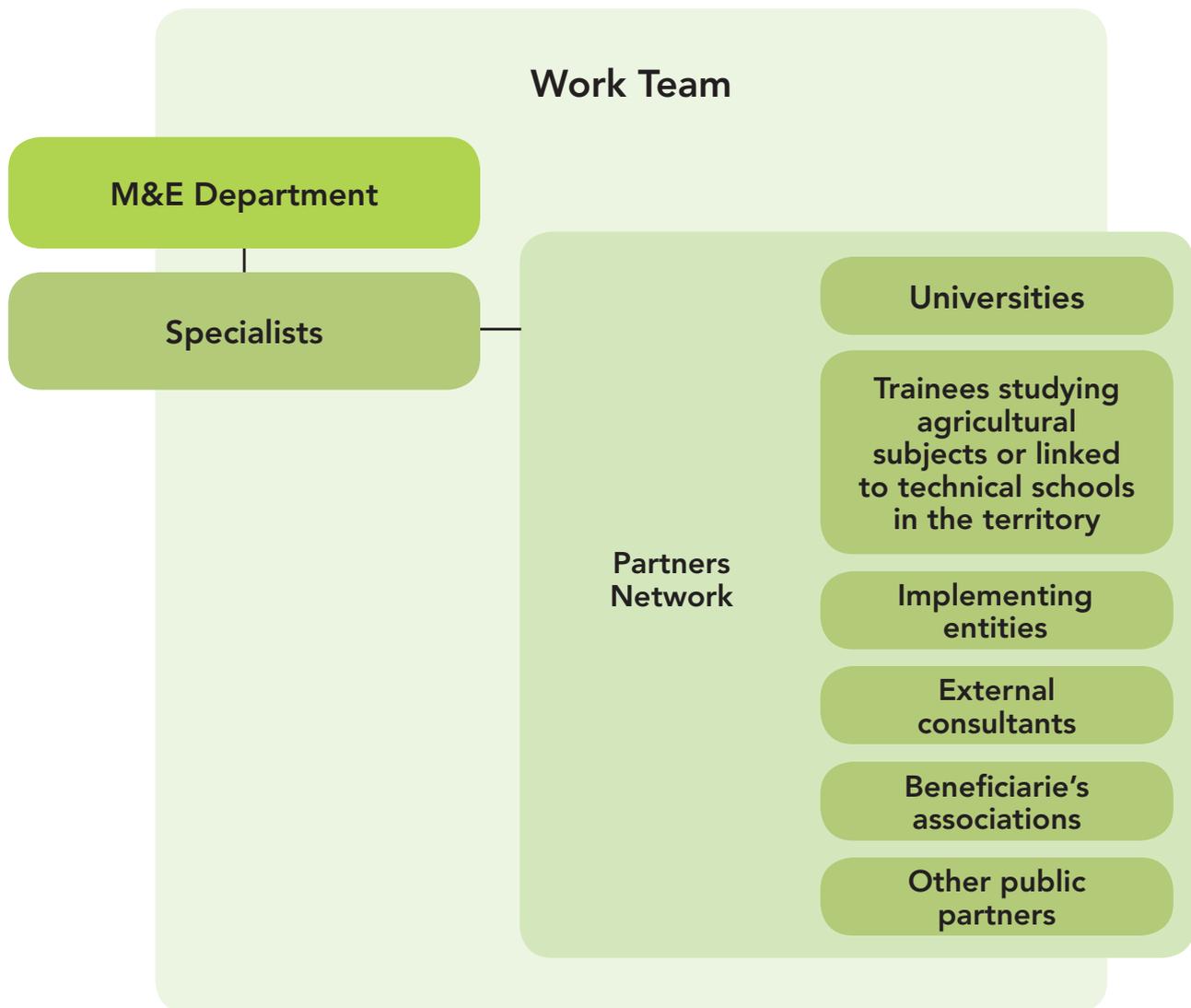


Figure 2. Worksheet of outcomes

This exercise will allow the technical teams to work in the elaboration of the database, in the worksheet to feed this database, as well as the tables, graphs and data segmentations of the data pane (the different criteria for segmentation of information). This will establish the main structure of the tool.

## **b. Work team and time horizon**

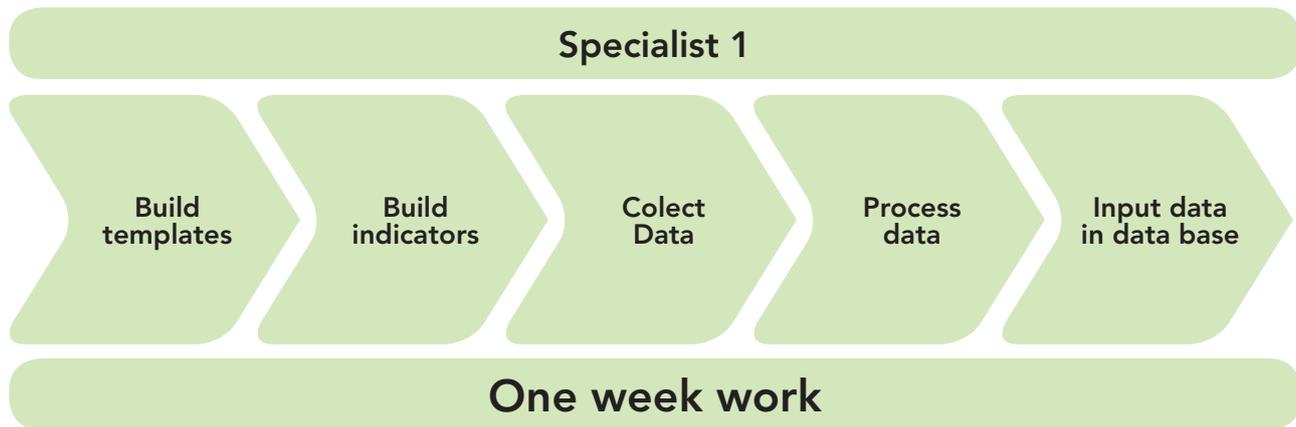
The work team can be composed of the field of M&E of the project, with the help of technical specialists, or it can be complemented by partnerships with different actors. Partnerships may involve:



A schedule has to be defined, including key dates for the technical part, data collection, delivery of information and strategic discussion. The main criterion is that investments are already implemented with a complete production cycle.

The resources available for the exercise will determine the time to be implemented and to obtain the results, the sample size and the possible territorial coverage.

## Data processing diagram



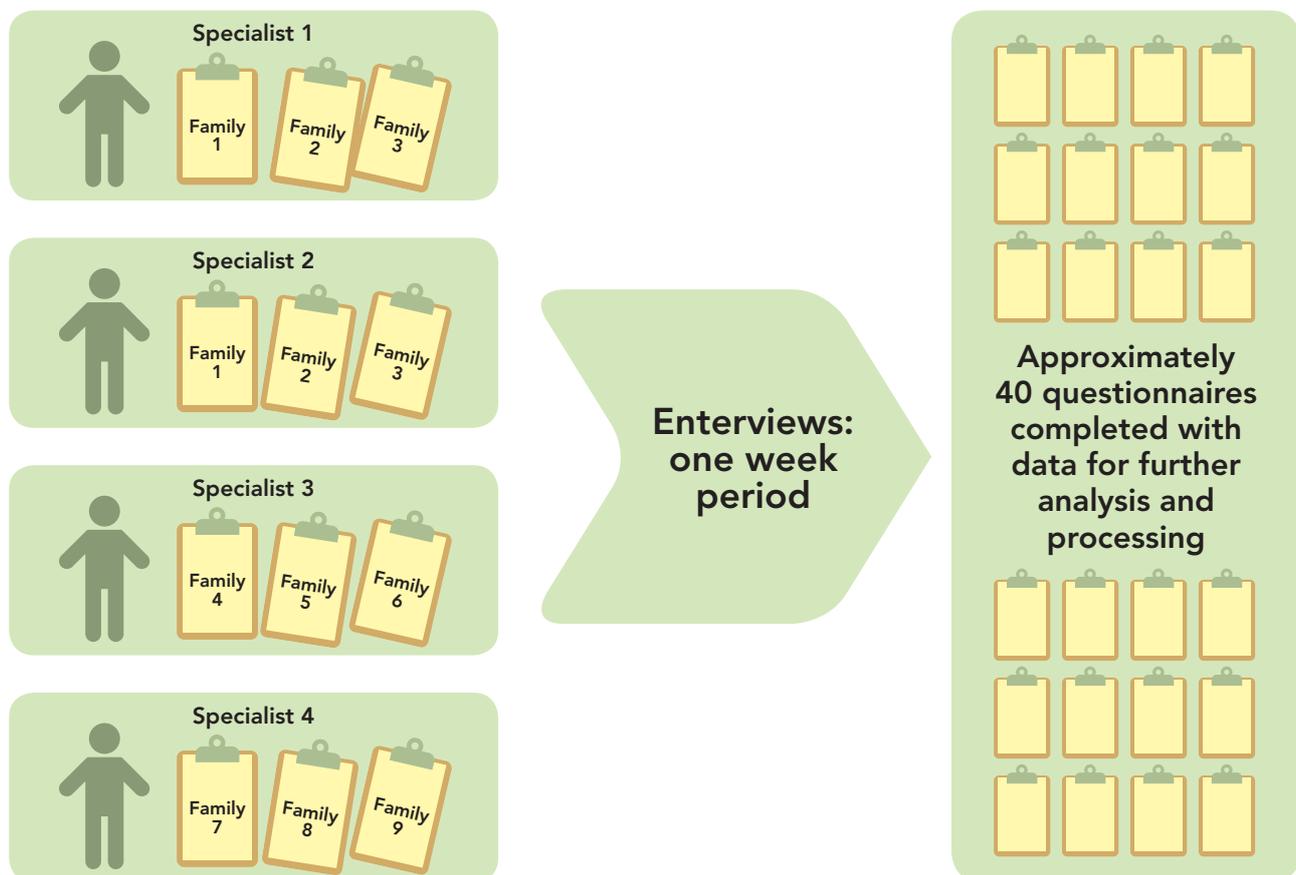
### c. Territorial focus

The exercise will be implemented with visits to beneficiaries and semi-structured interviews that will comprise the sample and feed the database. Each person has a story to tell and life experiences that cannot be quantified. The interviewer will try to quantify a part of the person's experience (the link to the project and the productive activity), and, to be more effective, the interviews must have a well-organized road map, since this part of the exercise takes a lot of time.

Therefore, the recommendation is to focus on one or a few regions based on the possible road maps, using the time in which the work teams are available, defined in point **b**. The territorial focus is aimed at putting regions that cannot be part of the same road map by the assigned teams in another turn. The greater the implementation team (defined in point **b**) or the availability of time, the greater the flexibility to define the territorial focus, thus allowing the sample to expand. income stabilization what is

#### d. Sample size

The sample size is linked to the possibilities of work teams for collecting information, as well as to the representativeness of the exercise. A minimum size of 40 to 50 cases would be enough to compare the segments (municipalities, activities, etc.). One person, in a week, would be able to perform a minimum of approximately 10 to 12 interviews (from 2 to 3 per day). Thus, a data collection team by at least 3 people could be formed, for a week, so that the database can be analyzed. The ideal would be to obtain a sample of at least 50 out of 75 cases chosen. However, the most important thing will be **the sample randomness**, which will enable performing a reliable exercise.



## Step 2. Tool design

After defining the indicators, the desired graphs and tables and the sample size, working on the design of the Excel tool and of the documents for data collection will be possible.

The tool is divided into three parts:

1 <sup>st</sup> Part	2 <sup>nd</sup> Part	3 <sup>rd</sup> Part
Visualization: for communication, both external and internal (data pane, presentation of outcomes and possibly a map with links for file navigation);	Filling of data based on the data collection (which must be performed by each interviewer), with the respective questionnaires;	Global database: which will be treated to obtain the results of the visualization.

With the design of the first part (remember to begin with the end in mind), the questionnaires, the tables to fill the data and the database can already be created.

## a. Visualization design and Data pane

The first thing is to define the visual presentation of the outcomes (figure 2) and the data pane to be fed, which will be the final outcome of the exercise.

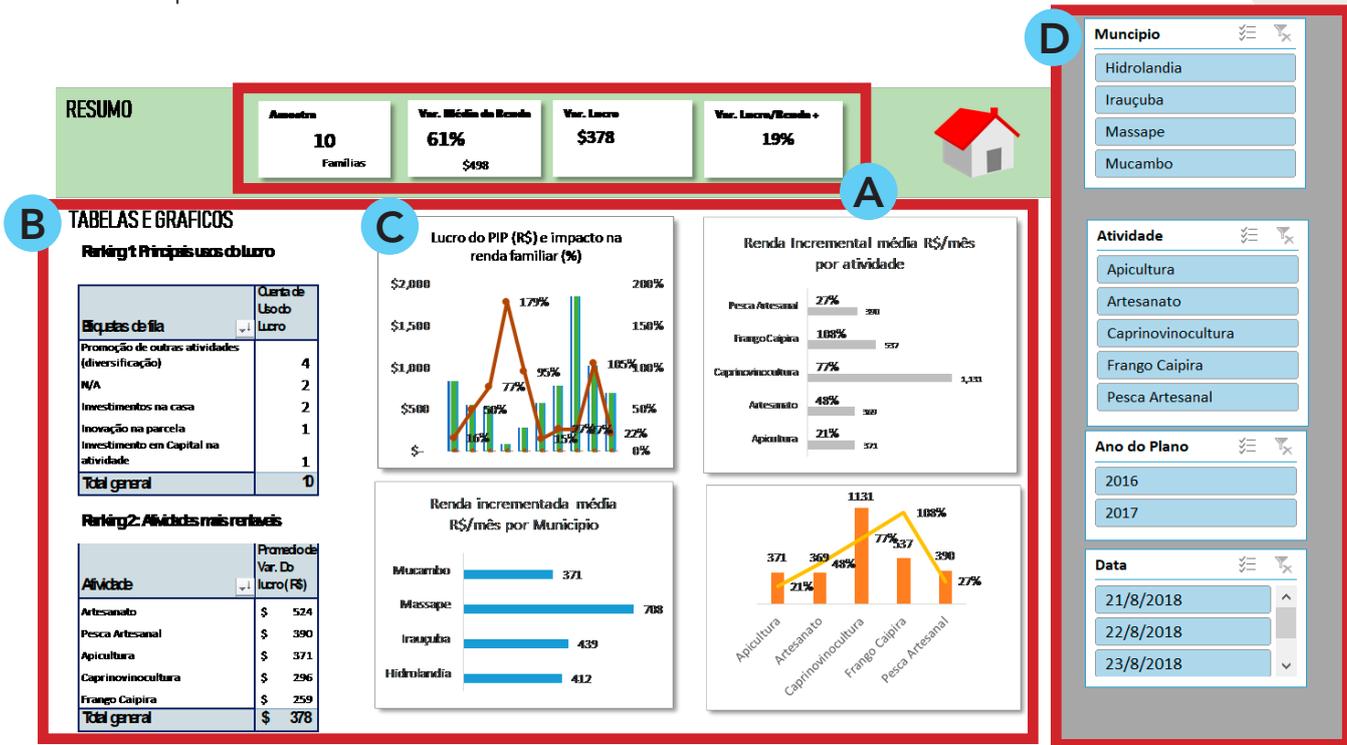


Illustration 3. Example of data pane

The data pane will have to contain:

**A.** The main summary indicators;

**B.** The tables chosen;

**C.** The graphics chosen;

**D.** The segments selected (municipality, year, activity, date of harvest).

All elements can be made based on the global database, with Excel pivot tables and data segmentation, configured to update all outcomes.

## b. Database design

The database must group the families interviewed together, one by one, including all the information needed to obtain the results desired.

In addition to the general numbering (family 1, family 2, family 3, etc.) or the general identifiers (name of the investment plan), the base must have the segments desired (e.g. municipality, harvest date, activity, year of plan, entity, production cycles with investments, among others) and the information for creation of the graphs and tables.

Based on the global database, pivot tables, which can cross-check quantitative and qualitative data, will be compiled to obtain the outcomes desired. Each data of the database must be premised on the information filled and verified by each technician responsible. See the example of database in Annex 1.

The quantitative information are, for example: monthly family income after the project, monthly family income before the project, monthly profit margin of the activity supported before and after the project, and calculation of the differences (in R\$ and in %). Other combinations are also possible (profit margin, income before and after the project, differences regarding the values expected in the logical framework, etc.), as well as other qualitative information, such as: use of the profit margin of the activity, or other variables whose answer is Yes or No.

N°	Data	Município	Caso	Plano do			Ano do		Var da renda		Dif com	Var. Do lucro		Lucro/Renda		
				Investiment	Plano	Investimentos	Atividade	investiment	Uso do Lucr	(SR)		(%)	Marco Lógic	(SR)	Sem	Com
1	21/8/2018	Irauçuba	Familia 1	Boa Vista II	2016	1	Artesanato	2017	Investimento er	259	0	-14%	259	39%	47%	9%
2	21/8/2018	Irauçuba	Familia 2	Boa Vista II	2016	1	Frango Caipira	2017	Promoçao de ou	618	0	20%	468	8%	30%	23%
3	22/8/2018	Massape	Familia 3	Trapiá	2017	1	Caprinovinocult	2017	Investimentos n	1131	1	47%	296	17%	21%	4%
4	22/8/2018	Massape	Familia 4	Trapiá	2016	1	Frango Caipira	2017	Promoçao de ou	374	2	149%	94	0%	16%	16%
5	22/8/2018	Massape	Familia 5	Trapiá	2017	1	Frango Caipira	2017	Promoçao de ou	619	1	65%	215	11%	23%	11%
6	22/8/2018	Mucambo	Familia 6	Poço Verde	2016	0	Apicultura	2017	Inovaçao na p	268	0	-15%	268	18%	28%	11%
7	22/8/2018	Mucambo	Familia 7	Poço Verde	2016	0	Apicultura	2017	N/A	473	0	-3%	473	18%	35%	17%
8	23/8/2018	Hidrolândia	Familia 8	Santa Teresa do	2016	1	Pesca Artesanal	2017	N/A	390	0	-3%	390	100%	100%	0%
9	23/8/2018	Hidrolândia	Familia 9	Santa Teresa do	2016	1	Artesanato	2017	Promoçao de ou	552	1	75%	952	14%	95%	81%
10	23/8/2018	Hidrolândia	Familia 10	Santa Teresa do	2016	1	Artesanato	2017	Investimentos n	295	0	-8%	360	25%	43%	17%

Figure 4. Database

### c. Design of the tables for filling of the information collected

Tables must be selected based on the economic outcome indicators to be visualized. If we want to visualize profit margin of the activity and family income, for example, the following tables can be used:

Tabela 1a

Item	Unidade	Familia X- Municipio Y Atividade
<b>SEM PROJETO</b>		
Custos <i>*Custos incluindo mao de obra (H)</i>	\$R/familia/frequencia	A
Vendas	\$R/familia/frequencia	B
<b>Margem</b>	\$R/familia/frequencia	$C = B - A$
<b>COM PROJETO</b>		
Custos <i>*Custos incluindo mao de obra (I)</i>	\$R/familia/frequencia	D
Vendas	\$R/familia/frequencia	E
<b>Margem</b>	\$R/familia/frequencia	$F = E - D$
<b>Aumento %</b>	%	$G = (F - C) / C$
<b>Mao de obra sem</b>	\$R/familia/frequencia	H=Tempo(días ou horas/Mes ou Ano) x Valor do tempo (R\$XX) SEM PROJETO
<b>Mao de obra com</b>	\$R/familia/frequencia	I=Tempo(días ou horas/Mes ou Ano) x Valor do tempo (R\$XX) COM PROJETO
<b>Margem</b>	\$R/familia/frequencia	F x frequencia
<b>Renda familiar pela atividade (com Mao de obra)</b>	\$R/familia/frequencia	J = F + I
		<i>*Margem ± Mao de obra</i>

Figure 5. Example of table for calculating the profit margin of the activity

Tabela 2

Item	Atividade- Família X- Município	Detalhes
	\$R/Frequencia	
Bolsa Familia	K= \$R_____	Tem/ Nao tem /(\$R)x (Quantos)
Aposentadoria	L= \$R_____	Tem/ Nao tem / (\$R)x (Quantos)
Atividade sem projeto	C (Tabela 1a)	Tabela 1a
Atividade com projeto	F (Tabela 1a)	Tabela 1a
Mao de obra sem projeto	H (Tabela 1a)	X horas/días por /frequencia/ (X \$R/hora ou día)
Mao de obra com projeto	I (Tabela 1a)	X horas/días por /frequencia/ (X \$R/hora ou día)
Outras atividades	M= Soma das rendas das outras atividades N= Soma das outras rendas	Renda (outra atividade 1): \$R_____
Outras rendas (ajudas, etc)	O= Soma da reducao de compras	Renda (outra atividade 2): \$R_____
Redução das compras com projeto (\$R)	P=X%	Renda (outra atividade 3): \$R_____
% outras atividades que já estava fazendo	Q=X%	Ex: Salarios / Ajudas / Remessas \$R__ / semana ou mes (Produto 1)
% outras rendas que já estava fazendo		\$R__ / semana ou mes (Produto 2)
<b>Renda monetaria familiar sem projeto</b>	$R=K+L+C+H+MxP+NxQ$	Sem projeto das outras atividades /%)
<b>Renda monetaria familiar com projeto</b>	$S=K+L+F+I+M+N+O$	Sem projeto das outras rendas /%)
Diferença (\$R)	$T=R-S$	Cálculo
<b>Diferença (%)</b>	$U=T/R$	Cálculo
Pessoas ativas por familia	Numero	Aumento da renda
		% aumento da renda
		Para Cálculo de renda per cápita

Figure 6. Example of table for calculating income

Tables **(A)** could be filled by the interviewers based on the information collected in the questionnaires. Regarding the profit margin indicator of the activity, the questions have three central focuses: costs, sales and time. In the case of family income, the questions can be more complex since the family can have many members and the sources of income are diverse.

The exercise can be done by filling one worksheet per family. In each Excel spreadsheet, the filling of a line containing the same information as those from the database is important to facilitate the harmonization of information **(B)**.

DADOS									
Data	Município	Caso	Plano de Investimento	Investimentos recebidos	Ano do Plano	com Investim	Atividade	Ano do Investimento	
21/9/2016	Itapecuru	Família 1	Boa Vista II	5500	2016	1	Artesanato	2017	
21/9/2016	Itapecuru	Família 2	Boa Vista II	5500	2016	1	Frango Caipira	2017	

Item	Unidade	Atividade		Bola Família	A
		Artesanato Família I- Boa Vista II	Frango caipira Família II- Boa Vista II		
<b>1</b>					
<b>SEM PROJETO</b>					
Costos	SR/ família / mês		499	191	
Vendas	SR/ família / mês		940	210	
Margem	SR/ família / mês		141	19	
<b>COM PROJETO</b>					
Costos	SR/ família / mês		800	248	
Vendas	SR/ família / mês		1.040	660	
Margem	SR/ família / mês		240	412	
Aumento %	%		79%	2068%	
Mao de obra sem	SR/ família / mês		480	78	
Mao de obra com	SR/ família / mês		640	180	
Margem (sem Mao de obra)	SR/ família / ano		2.880	4.944	
Renda familiar (com Mao de obra)	SR/ família / mês		840	662	
Renda familiar (com Mao de obra)	SR/ família / ano		10.080	6.744	

Item	Artesanato Família I- Boa Vista II	Detalhe	Frango caipira Família II- Boa Vista II	Detalhe
	SR/Mes		SR/Mes	
<b>2</b>				
Bola Família		Não tem	370	SR 85 por família
Alimentadora	980	Tem	980	Tem
Atividade sem projeto	141	Veja acima	19	Veja acima
Atividade com projeto	240	Veja acima	412	Veja acima
Mao de obra sem projeto	480	3 dias por semana SR 40	75	30 min hora/ dia / mes SR 40
Mao de obra projeto	640	4 dias por semana SR 40	150	1 hora / dia / mes SR 40
Outras atividades	0		0	
Outras rendas (ajudas, etc)	0		0	
Redução das compras com projeto	0		350	
Reduzir dias compras com projeto	0%		30%	
% das outras atividades que já tinha	0%		0%	
Renda familiar sem projeto	1400		1244	
Renda familiar com projeto	1.869		1862	
Diferença (SR)	259		618	
Diferença (%)	16%		50%	
Perdas extras por família	3		3	

Figure 7. Example of the worksheet to be filled by each family

## d. Design of the questionnaires

Questionnaires should incorporate a general and an introductory descriptive part (A), a part with quantitative questions (B) and a part with qualitative or open questions (C). The recommendation is to use photos to corroborate the data, but always with the consent from the beneficiary (D).

QUESTIONÁRIO TIPO						
Verificação da Família	1-	Nome / Sobrenome				
	2-	Beneficiário / Membro da família				
	3-	Plano de Investimento			A	
	4-	Município				
	5-	Atividade principal				
	6-	Pessoas por família				
	Informação do Plano	7-	Tempo de assessoria técnica recebida			
		8-	Entidade			
9-		Investimentos recebidos			Monto	
					Mes/Ano	
10-		Formulação do Plano			Detalhe	
11-		Ciclos Completos de produção depois dos investimentos				
	12-	Contrapartida da família			Monto	
					Mes/Ano	
					Detalhe	
VENDAS	13-	vendas sem projeto				
	14-	Vendas com projeto				
	15-					
CUSTOS	16-	Custos sem projeto			B	
	17-	Custos com projeto				
	18-					
USO DO TEMPO	16-	Uso do tempo na atividade antes				
	17-	Uso do tempo na atividade agora				
	18-					
RENDAS	16-	Renda antes				
	17-	Renda agora				
OUTROS INDICADORES	16-	Compras externas			C	
	17-	Uso do lucro				
	18-	Financiamento do novo ciclo				

IMAGEM 1
IMAGEM 2
IMAGEM 3

D
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Figure 8. Example of questionnaire structure

# Step 3. Sample selection and planning of road map and schedule

After making the key decisions (the teams were planned and the sample size chosen) and designing the tool, selecting the sample and planning the road map and the schedule is possible.

Sample selection is the most important step for ensuring that the exercise is effective. There are three main criteria to achieve this goal:

- **Criterion 1:** Temporality of the exercise. All families will already have at least one (1) production cycle completed after receiving the investments; the data collection should already refer to the specific year, used during the interview. However, since the most important thing is to verify the results of the investments, the protagonist already has to have a production cycle with them to produce evidences.

- **Criterion 2:** Sample randomness, a crucial factor to add credibility and legitimacy to the exercise. It can be gained using Excel to filter, in the global table, only the beneficiaries who received the investment for at least one year.

Another strategy would be the selection of a random factor associated with each family and then the selection of the first 40 or 50 families. Or, it could be gained based on the territorial cut to ensure the feasibility of the road map. Having a database containing all the beneficiaries chosen is what matters. An alternative can be the random selection of organizations, associations or business plans (already filtered according to the criteria mentioned) and then the random selection of some cases inside the organizations / associations or plans.

Some considerations for planning the road map:

### Considerations for planning the road map

To combine, if possible, the road map of visits to the field of technicians with those to M&E specialists;

To coordinate with entities or implementers to facilitate the contact with beneficiaries;

If coordinating directly with the families is not possible, do it directly with the legal representatives of the investment plans or with the leaders of the associations or organizations involved.

# Step 4. Filling of family's worksheets

After selecting the sample, one can start filling the family's worksheets with existing information (without the need for field consultation). This step will facilitate the contact with the beneficiary and expedite the data collection.

The worksheets can be filled by the technical teams specially designated for the exercise and can be supplemented with support from other areas. The description aims to contextualize the numbers collected. Without contextualization, the stories and changes cannot be understood, since they are the key moments of connection between the project and the family.

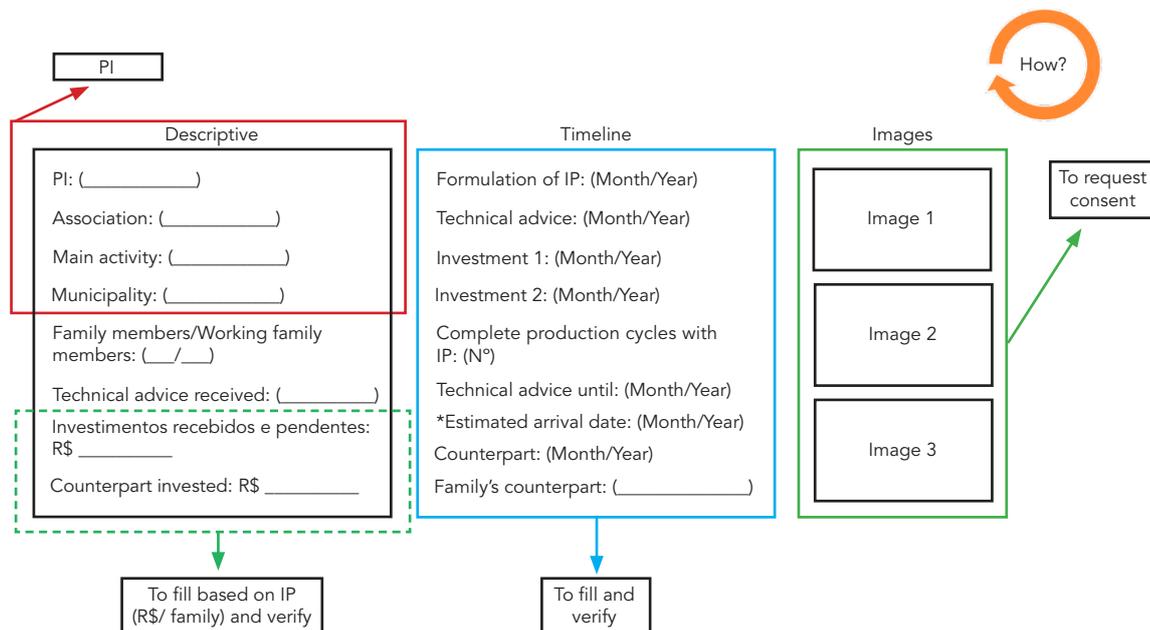


Figure 9. Example of instructions for filling the worksheets

Descriptive	Timeline	Images
<p><b>PI:</b> IP of artisanal fishing, hillbilly chicken, pig breeding, and sewing and tailoring</p> <p><b>Association:</b> Associação Comunitária Manoel Costa Sobrinho</p> <p><b>Main activity:</b> Artisanal fishing</p> <p><b>Municipality:</b> Santa Teresa do Silvino</p> <p><b>Family members/ Working family members:</b> (5/3)</p> <p><b>Technical advice received:</b> 24 months</p> <p><b>Entity:</b> Cetra</p> <p><b>Investments received and pending:</b> R\$ 5.500 / R\$ 3.500</p> <p><b>Counterpart invested:</b> R\$ 40.000</p>	<p><b>Formulation of IP:</b> October 2016</p> <p><b>Technical advice:</b> November 2016</p> <p><b>Investment 1:</b> March 2018</p> <p><b>Investment 2:</b> pending</p> <p><b>Complete production cycles with IP:</b> 1</p> <p><b>Technical advice until:</b> October 2019</p> <p><b>Estimated arrival date:</b> September 2018</p> <p><b>Counterpart:</b> June 2018</p> <p><b>Family's counterpart:</b> Manpower in the buildings and 2 machines</p>	

Figure 10. Example 1 of worksheets filled

<p><b>Family VII - Hidrolândia</b></p> <p><b>Santa Teresa do Silvino e Zé Lima</b></p> <p><b>Activity of the IP:</b> Artisanal fishing</p> <p>Formulation of the IP: June 2016</p> <p>Investments received: Canoas / Rabeta (R\$ 2.900), inputs (R\$ 1.454)</p> <p>Technical advice received; Cetra (3 years)</p>	<p>Imagem</p>	<p><b>Quantitative results</b></p> <ul style="list-style-type: none"> <li>• % Additional income (R\$) 390 / month</li> <li>• % Increase in income: 27%</li> <li>• % Increase in the contribution of the activity to the income: 0%</li> <li>• Monthly family income with project (R\$) 1.850</li> </ul>
		<p><b>Qualitative results</b></p> <ul style="list-style-type: none"> <li>• Income stabilization (fishing was not a stable activity)</li> </ul>

Figure 11. Example 2 of the worksheets filled in the final family's form (part A only)

# Step 5. Data collection (technical level)

Data collection must be done specifically by the designated teams before asking the questions about critical issues. They are the following:

- To leave the interviewee free to talk about their connection with the project and listen to the demands they may have;
- Explain the questions that will be asked and their use;
- Ask questions according to the indicators desired. For example, the following questions are suggested for profit margin and income:

## Example of Profit margin

### **Guide to questions**

#### **Sales (Before/After):**

- How many / units / of / product / are sold per / frequency /? (average)
- How many / " / of / " / were sold in the last / frequency /? (proxy):
- What is the price? (average)
- What was the price? How is its variation? (proxy)

#### **Costs (Before/After):**

- How much money do you spend to produce / the amount mentioned/? (average)
- What are the main expenses? How much do you spend on each one?
- How much did you spend in the last / frequency / to produce / the amount mentioned /? (proxy)

#### **Time needed (Before/After):**

- How long do you work per / frequency / to produce / the amount mentioned/?
- How much time did you spend / frequency / to produce / the amount mentioned/ of the product?

## Example of Family income

### **Guide to questions**

#### **Sales (Before/After):**

#### **Additional income (Before/After).**

- How much money do you earn per / frequency / in ...?
- Income from the productive activity - What is the income from the / productive activity /?
- Are you beneficiary of the Bolsa Família program?
- Do you receive pension?
- Do you receive other financial assistances? Which ones?

#### **Other activities / Other incomes (Before/After).**

- How much profit do you earn per / frequency / from ...?
- Other activities
- Daily
- Salaries

#### **Reduction in purchases / expenses with the project.**

- Are there products that you used to buy and now you are producing?
- How much money did you spend on the products monthly?

The information addressed is very sensitive and can affect the privacy of families. Thus, an introductory explanation about the relevance of the exercise and the anonymity of the data is necessary. The recommendation is to conduct private interviews.

Information not available in the interviews can be found in other sources (local technicians, statistics or official reports, other actors), if the participants do not know them.

If the participants have records of costs, expenses, etc., some information can be collected directly from them without the need for complete interrogation.

Only the beneficiaries' questions and answers will not meet all the needs of the tables, and, for this purpose, they will have to be coded and treated (through calculations and estimations verified). To do this, using a separate table, with the premises of the information that will be filled in the main tables, which are the intermediation with the questionnaires, is recommended. This processing of the information collected will be translated into indicators.

The beneficiary's testimony is the main source of information, but it may be validated and verified through cross-checking and other consultations.

Tabela 1b

Unidade	Vendas	Custos	Premissas Detalhe	Uso do tempo	Fonte
<b>Nome da atividade</b>	Sem projeto: Preço / Quantidade / Frequência x Produto Com projeto: Preço / Quantidade / Frequência x Produto	Sem projeto: Preço / Quantidade / Frequência x Produto Com projeto: Preço / Quantidade / Frequência x Produto	Destritivo / Indicadores de melhora produtivos	Sem projeto: X hora/dias por dia/semana/mês Com projeto: X hora/dias por dia/semana/mês	Entrevista dia X0/X00 (Outros documentos ou entrevistas)

Figure 12. Example of a table of premises to intermediate the information collected and the development of indicators.

Finally, some problems that may occur during the exercise, specifically in the data collection, and some possible ways of solving them are:

- **Frequency:** Indicators must have the same frequency unit to be comparable between themselves. For this purpose, the interviewer has to choose the most relevant frequency according to the productive activity and/or to make calculations that allow harmonization. This is especially important when activities are markedly different in sales, prices and costs, depending on each year's season, or when the families have unstable occasional income (it needs to be harmonized per month or year)

- **Unit of measurement:** units can be values R\$ (real), percentages (%) or units of measurement of products (quantity, etc.). Using values and percentages prevents compatibility problems.

- **Unit of analysis:** , it will usually be the family, but it could also be the productive activity (except the family income) or the cooperative or association (in cases of collective investments in which the associations are protagonists).

- **Variability in price:** to solve the variability in the price of the products, the ideal would be to make an average of the sale prices according to the quantity distributed. Otherwise, an average between the minimum or maximum annual values would already be more representative than the last value at the time of the interview.

- **Situation without the project:** regarding an activity that the beneficiary did not perform before, knowing the income or the profit margin in the situation without project is very difficult. An effort has to be made to rebuild the protagonists' incomes and gains. If the values are obtained, they can already be comparable between themselves and added to the table of premises.

- **Temporality:** beneficiaries will hardly be accurate about dates. A simple before and after of the investments is viable to start obtaining information. However, although it is possible, understanding how much time has passed after the numbers were collected (one, two or three years) is important.

- **Labor costs:** the same criterion has to be adopted concerning the situation without and with project when we consider, or not, the family labor costs. If considered, it will have to be counted in the market price or with a determined value based on the data collections. If it is not previously considered in the costs, counting will be done as a result, in the margins, by dividing them by the time required (before and after).

- **Explanations about possible contextual situations or conflicts that can change the dynamics expected:** sometimes the result of the project, when a conflict happened, will show a decrease in the incomes or productive activities. However, the decrease, with the explanations about context, could not be a negative indicator of the project since, with the impact assessment, verifying that the beneficiary was possibly less affected than those who had not participated in the project will be possible. In this case, what matters is to give the explanations of context that could change the interpretation of the exercise the way it is presented.

In general, a technician could do between 2 and 3 interviews a day, each one lasting 1h30.

# Step 6. Transfer of the information of the tables - Filling of the templates (technical level)

Considering that the *templates* were created and the data collected, the next task is to process the data collected in the tables designed and to develop the indicators that will feed the global database. This is a technical task requiring time and verification of information.



To prepare and process the information, a technician can visit a minimum of 2 or 3 families a day (without considering validation and whether all data can be obtained).



The most important thing is the technician's caution and the permanent support by the person responsible for the exercise regarding methodological decisions and indications about possible doubts. The responsible for technical aspects will make the decisions that will harmonize all the filling of information so that the exercise becomes valid.

## **Step 7. Comparison, Summary and Automation of the Pane**

The tasks of comparison, summary and automation of the pane will be related to the requirements of each project, to the cross-checking of information and of the data to be presented, and to the segmentations chosen. The technical work consists of creating pivot tables according to the requirements of the data pane, on the global database. Data processing has knowledge of pivot tables and data pane in *Excel* as a requirement.

## **Step 8. Discussion of results (technical level)**

With the information processed, the comparisons made and the main indicators summarized, a small validation workshop and data presentation is recommended. In it, one can discuss the hypotheses, the partial evaluations of performance and the problems detected, as well as the changes of strategy for the implementation of the projects. This is a purely strategic sphere led by the managers.

## **Step 9. Preparation of reports (technical level)**

Finally, the information must serve as basis for the preparation of the reports required. They can be internal reports, strategic communication actions or transparency reports.