COADY

Innovation series

No. 3c

Producer-led value chain analysis: The missing link in value chain development

A facilitator's guide

December, 2018

INNOVATIVE PRACTICE

COADY
INTERNATIONAL INSTITUTE
ST. FRANCIS XAVIER UNIVERSITY

Contents

The Coady International Institute's Innovation series, launched in 2015, showcases the work of Coady faculty, associates, and partners. Acting as a bridge between academic and practitioner worlds, the Coady Institute contributes new ideas, new ways of putting ideas into practice and innovative ways of creating transformative experiences in our educational programs. The publications in this series are colour coded to identify these three aspects of innovation using the "Coady colours" : blue for "innovative thinking", green for "innovative practice" and orange for "innovative teaching".

ISSN 1701-1590

The Coady International Institute
St. Francis Xavier University
PO Box 5000
Antigonish, NS
Canada B2G 2W5

Phone: (902) 867-3960
Phone: 1-866-820-7835 (within Canada)
Fax: (902) 867-3907
Web: www.coady.stfx.ca
Email: coady@stfx.ca

Introduction

A quiet revolution was taking place in northeastern Canada in the late 1920s. Based in Nova Scotia, the Extension Department of St. Francis Xavier University began organizing primary producers working in the farming, fishing, forestry and mining industries into study clubs on the economy. These study clubs were often held in the homes and workplaces of community members.

During these meetings, producers studied their social and economic situation and shared ideas for pooling resources and improving their livelihoods collectively. Over time, this combination of adult education and cooperative action became known as the "Antigonish Movement". This movement led to the formation of member-owned institutions such as credit unions, processing and marketing cooperatives, and consumer-owned stores. These institutions helped producers earn more income and take more control of the local economy (Coady, 1939).

Today, the principles of the Antigonish Movement continue to be relevant all over the world. Be it the Self-employed Women's Association (SEWA) in India securing access to finance and markets for over two million women producers, International Development Enterprises (iDE) connecting rural producers to markets in Ethiopia, the Widows and Orphans Movement (WOM) in northeast Ghana helping marginalized women producers add value to local products to sell in high value markets through a social enterprise, or the Partenariat pour le Développement Local (PDL) in Haiti working with local peasant organizations, they all rely on one key principle—that the local economy could be strengthened with the right type of knowledge and learning generated by local people themselves. Effective engagement of small producers was at the heart of the success of the Antigonish movement as well as the other examples mentioned above.

Connecting small producers to markets is a key challenge facing the development community, particularly in the emerging economies context. The dominant framework that helps us understand the linkages between producers and markets is that of the value chain. Simply put, a value chain "describes the full range of activities that are required to bring a product or service from conception, through the intermediary phases of production and delivery to final consumers, and final disposal after use" (ILO, 2015). The following activities add value to the product, hence it is called value chain:

Value chain analysis (VCA) is a process to study and understand different enterprises, markets and relationships among key stakeholders. VCA is often conducted by experts and the process results in a compilation of information and analysis useful in designing programs and initiatives for increasing production, reducing costs, adding value, and accessing new markets. While the value chain reports contain useful information, experience suggests that the learning generated through the process does not fully translate into building the capacities of the producers themselves, as Ghore (2015) explains:

> VCA is often conducted by external experts and the knowledge generated in the process is often confined to reports. Without the capacity-building and effective participation of women and men producers — smallholder farmers who hold critical knowledge about the local context — an important link is missing in the entire process of VCA (p. 1).

This guide is an attempt to fill this gap and present a process through which field level facilitators and producers can effectively engage in VCA. In other words, this guide is not meant to replace the existing methods of VCA, but to complement them. The process allows producers to generate the information that comes from the VCA and to design their own action plans to improve their position in the value chain, much like the approach of the Extension Department in Nova Scotia described earlier.

The tools were developed by Yogesh Ghore[1] at Coady International Institute and were first piloted with Oxfam Canada and their local partners in Ethiopia in 2012. Since then, the tools have been introduced to smallholder producers in Ghana, Kenya, South Africa, India and Haiti. The early results of piloting these tools are positive, including:

- increased understanding of the producers' role in the value chain: for example, the importance of product quality, value addition, and aggregation;
- changes in the attitudes and practices of producers and market actors towards improved production methods, use of inputs, and calculation of labour and profit;
- a greater appreciation of the role of women in the production cycle;
- trust and relationship-building between producers and other market actors; and
- increased local ownership of the initiatives that emerge from the VCA (Ghore 2015).

The purpose of this guide is to allow others to test these tools and send feedback so they can be refined and improved over time. This feedback can be sent to Yogesh Ghore, Senior Program Staff, at Coady International Institute: yghore@stfx.ca.

[1] This guide is adapted by Brianne Peters from Ghore (2015) Producer-led value chain analysis: The missing link in value chain development. His paper is the foundation for this guide and provides a rationale and in-depth analysis of how this process was piloted with Oxfam Canada in Ethiopia.

What you will need to do a VCA

A facilitator (you): A facilitator can be a field worker from an NGO, government office, private business, or a literate producer. To facilitate a VCA, you need to have a basic understanding of the product the group is going to study. For example, if the group wants to look at how they produce and sell onions, then you should know about the markets for onions.

A group of producers who want to improve their livelihoods: The group can be a formal association like a cooperative or a collective, a women's savings association, or a group of producers who all produce the same commodity, like farmers producing tomatoes, for example.

Tip: For the beginning of each step, you, the facilitator, will be the leader. As time goes on and producers become more comfortable with the steps, they can also lead the process.

Where to do a VCA: The VCA should take place in an area that is big enough for everyone to fit comfortably. There must be a large wall space. It is best if you meet producers in their own community. If this is not possible, then a hall outside the community will also work.

Time: It usually takes between 3-5 days to do a VCA. However, NGOs, government, and private sector actors need to provide follow-up and ongoing support following the analysis. Here is an example of how Oxfam Canada did a VCA in Ethiopia.

Table 1: Example of a VCA schedule

When	Activity	Location
Day 1-2	Step One: Generating a Leaky Bucket Step Two: Selecting a product for VCA: The Product Bucket Step Three: Mapping inputs and services Step Four: Mapping markets for inputs and services Step Five: Mapping markets for sales	In the community
Day 3	Step Six: Meeting value chain actors and support actors (e.g. input provid¬ers, government offices, brokers, retailers, wholesalers, unions, and credit providers)	Markets, offices
Day 4	Reporting back on interviews Completing the VCA Step Seven: Identifying potential opportunities to improve the value chain	In the community
After the VCA is completed	Step Eight: Validating the VCA at a workshop Presenting potential opportunities to value chain actors and support actors	In the community or meeting hall
After the validation workshop	Action planning	In the community
Ongoing	Supporting community action plans and revising them as needed	In the community

STEP ONE: Leaky Bucket

What you will do:

- ✓ Show how money comes into, and leaves, producer households
- ✓ Estimate the value of money coming into, and leaving, producer households

What you will need:

- ✓ Flip chart paper
- ✓ Markers

Process:

1. Draw a picture of a bucket.

2. Draw arrows coming into the top of the bucket. These arrows represent the different ways that money is coming into producer households. You can call these arrows "income sources".

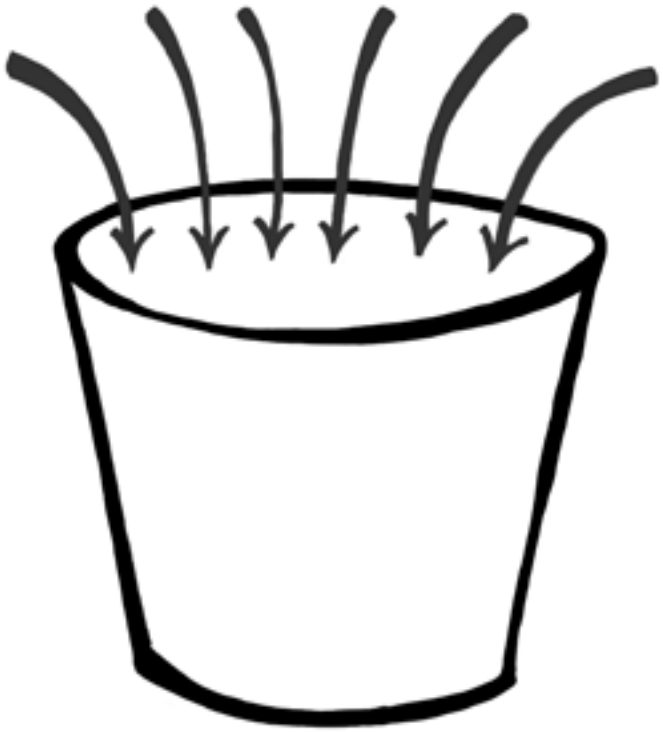


Figure 1: Arrows representing income sources flowing into producer households

3. For each arrow, ask producers to tell you one income source coming into their household. These income sources can be described with text, pictures, or both. Here are some examples of income sources: daily labour, petty trade, vegetable sales, and livestock sales.

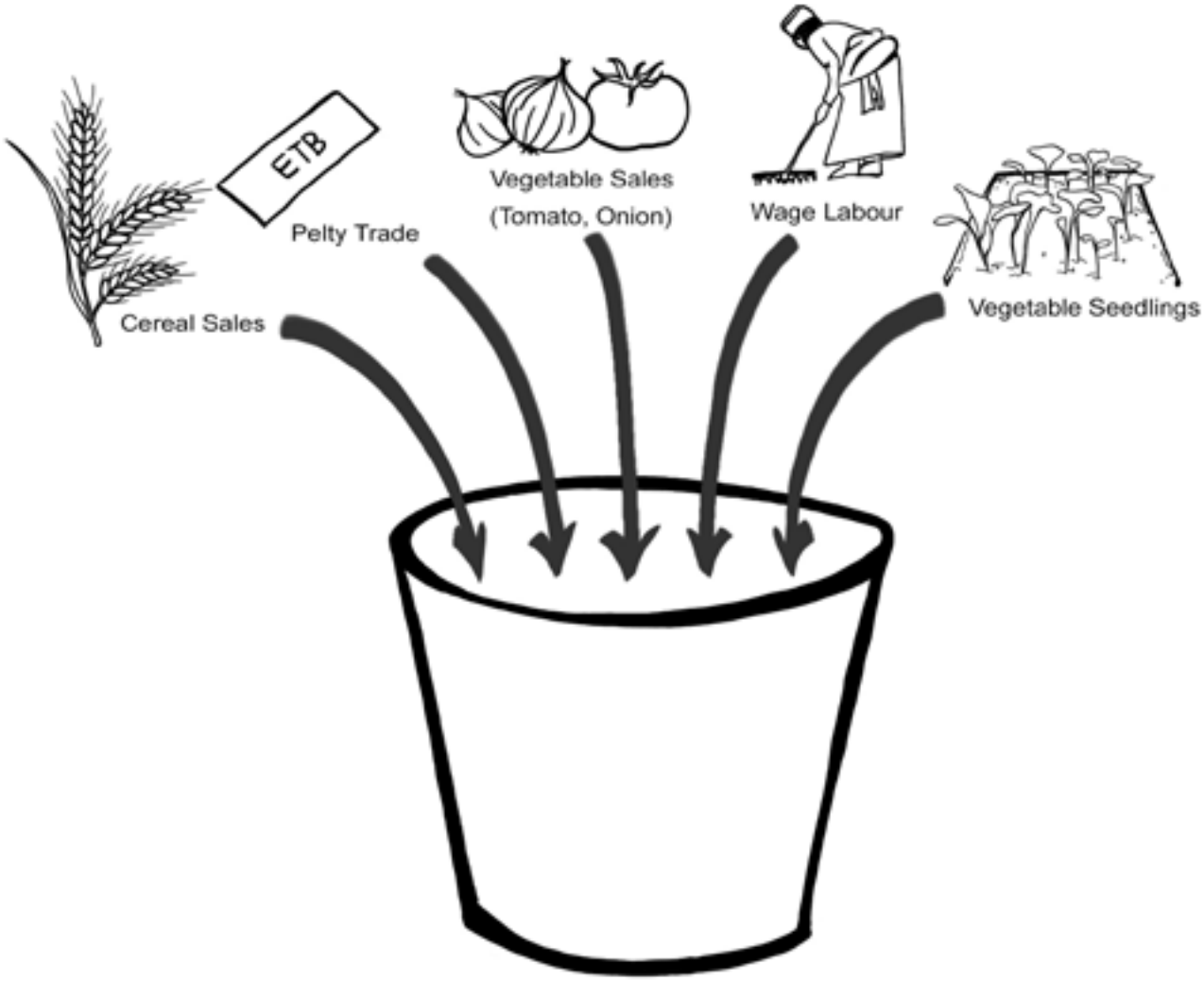


Figure 2: Examples of income sources

4. Draw arrows coming out of the bottom of the bucket. For each arrow, ask producers to name one thing they spend money on. You can call these arrows "expenditures". These expenditures can be described with text, pictures, or both. Here are some examples of expenditures: school fees, agricultural inputs, social festivities, alcohol, and food.

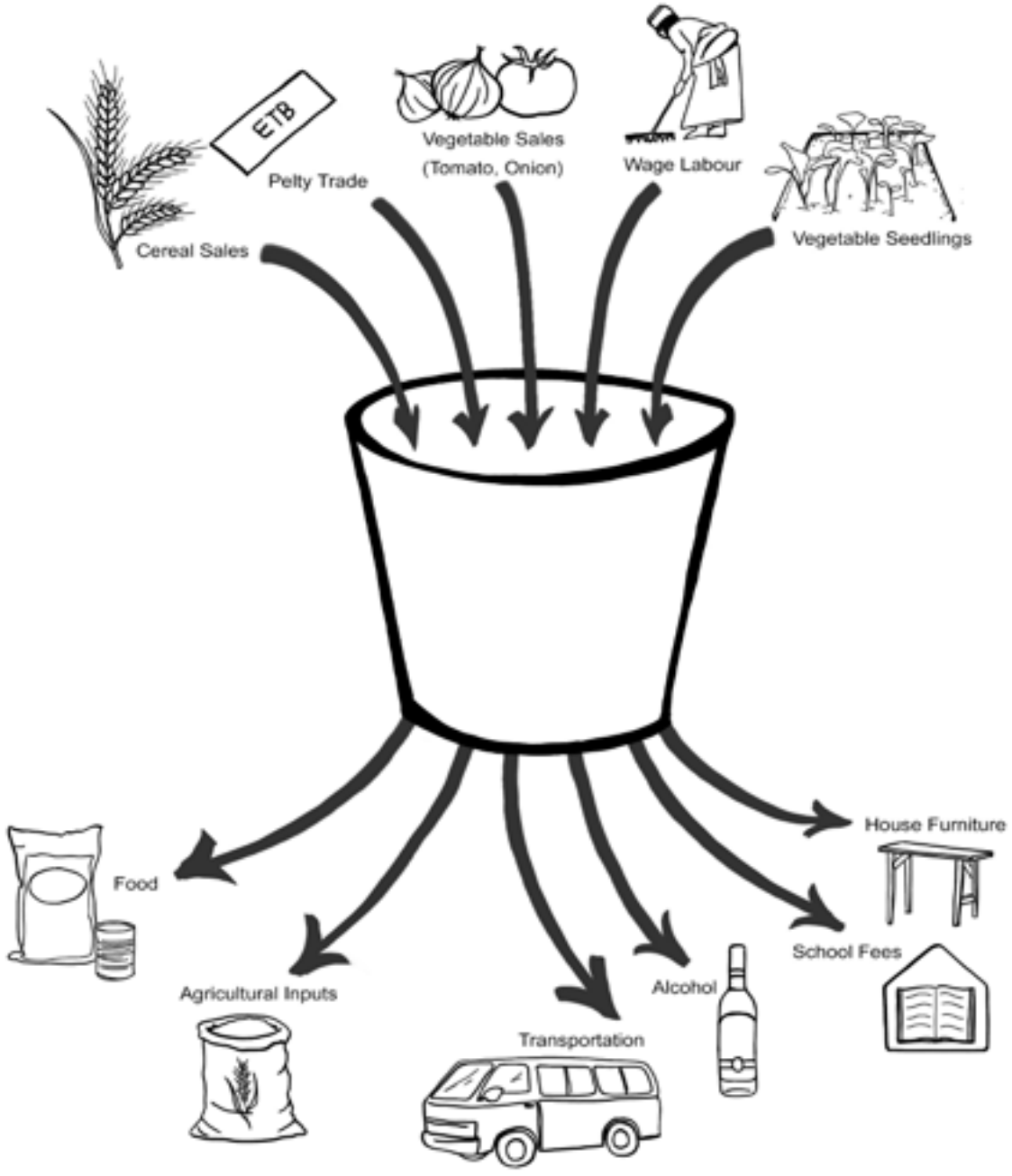


Figure 3: Examples of income sources and expenditures

5. Now go back to the income sources. Ask producers to estimate how much money they earn on each of the income sources in one year.

   Note: Some facilitators like to estimate the income of the whole community for each source. Some facilitators like to estimate the income for this group only. To calculate, ask the following questions:

   - How many producer households do this activity in the group (or in the community)?
   - How much money do producer households earn on this activity on average in one year?

     You may have to break this amount down by season, by week, or by month first.

6. Multiply the number of producer households by the income earned. Here are two examples:

   Vegetable sales: 50 households in the group x 10,000 Ethiopian Birr (ETB)/season = 500,000ETB

   Wage labour: 20 households in the community x 2000ETB/month x 6 months of the year = 240,000ETB

7. Now go back to the expenditures. Ask producers to estimate how much they spend on each of the expenditures on average in one year.

   Note: Some facilitators like to estimate the expenditures of the whole community. Some facilitators like to estimate the expenditures for this group only. To calculate, ask the following questions:

   - How many producer households spend money on this activity in the group (or in the community)?
   - How much do producer households spend on this activity on average in one year?

   You may have to break this amount down by season, by week or by month first.

8. Multiply the number of producer households by the amount spent. Here are two examples:

   Transportation: 50 households in the group x 300ETB/short season and 500ETB/long season = 40,000ETB

   Alcohol: 100 households in a community x 100ETB/week x 52 weeks = 520,000ETB/year

9. Now use the thickness of the arrows to show the income sources and expenditures that are the largest and the smallest. Thicker arrows mean that the income or expenditure is larger. Thinner arrows mean that income or expenditure is smaller. The diagram below, for example, shows that the largest income sources are from vegetable sales and seedlings. The largest expenditures are on agricultural inputs and food.

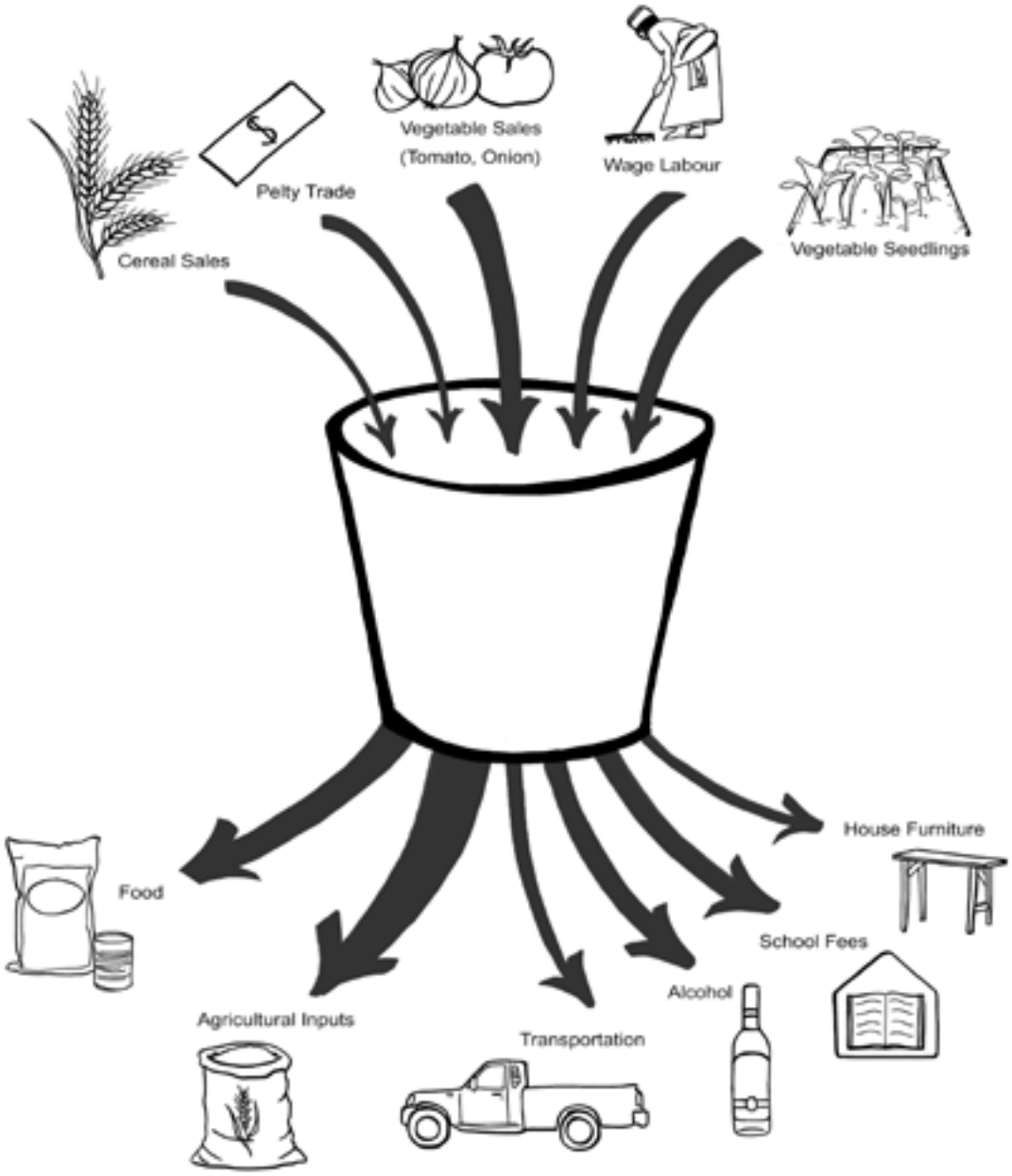


Figure 4: A Leaky Bucket showing the largest and smallest income sources and expenditures

10. Ask group members what they have learned from this exercise. Are they surprised by how much money is coming into the community? Are they surprised about how much money is leaving the community?

    In the next step, you will help producers explore opportunities to increase or diversify income sources and decrease expenditures.

Another way to do this exercise:

Some facilitators like to use a digital version of the Leaky Bucket instead of drawing it by hand. If you decide to use the Digital Leaky Bucket, you will need to have the internet to download the software onto a computer or laptop. To download the software, go to this web site: http://coady.stfx.ca/knowledge/digital_tools/dlb/. Once the software is downloaded, you can use the digital version anywhere, even if there is no internet access. To use the Digital Leaky Bucket at the community level, you will need a white wall, a projector, and a computer or laptop.[2]

[2] To learn more about the different uses of the Leaky Bucket, see Cunningham (2011) *Community economic literacy and the Leaky Bucket*.

STEP TWO: Selecting a product for VCA: The Product Bucket

What you will do:

- ✓ List ideas for income-generating activities
- ✓ Select a product for VCA
- ✓ Construct a Product Bucket

What you will need:

- ✓ Flip chart paper
- ✓ Markers
- ✓ Leaky Bucket (from Step 1)

Process:

The Leaky Bucket shows producer households how they are earning money and how they are spending money. It also helps producers think of ideas for income-generating activities that they may not have thought of before or of ways that they can reduce expenditures.

Figure 5: Producers discussing ideas to increase income

1. Ask producers if the Leaky Bucket exercise has helped them see any ways that they could increase their income.

2. Allow the group to discuss each of the opportunities.

3. Ask the group which opportunity they think has the most chance of success.

   Remember that "success" means different things to different people. Ask the group to explain *why* they are making this choice. You may want to ask some questions like:

   - Is there an accessible market for this product?
   - Can producers undertake this activity right now without much help from NGOs or government agencies?
   - Who will benefit from this activity?
   - Are there any negative consequences of unterdaking of this activity?

4. Once an opportunity is selected, ask one producer from the group to draw a new bucket and fill it with a picture of the activity the group decided to do. Here is an example of a group of producers that decided to do a VCA on onions to see if it would be a profitable

Figure 6: A Product Bucket for onions

   activity.

5. Explain that this is the "Product Bucket".

6. Explain that the Product Bucket is the first step of the VCA. In the next step, you will help producers see if the selected activity will be profitable by calculating the costs and revenue associated with producing and selling it.

STEP THREE: Mapping inputs and services

What you will do:

- ✓ Map the inputs and services that are needed to produce the selected product (onions)
- ✓ Calculate the cost of production of the selected product

What you will need:

- ✓ Product Bucket (from Step 2)
- ✓ Flip chart paper
- ✓ Markers

Process:

1. Draw arrows coming out of the bottom of the Product Bucket. These arrows represent the different expenditures that are associated with producing the selected product. These expenditures are called "inputs".

2. For each arrow, ask producers to tell you about one expenditure related to producing the selected product. This spending is usually on things like seeds, feeds, or fertilizer. It may also be on a service, for example, hiring labourers to help irrigate fields. This spending can be described with text, pictures, or both, as shown below.

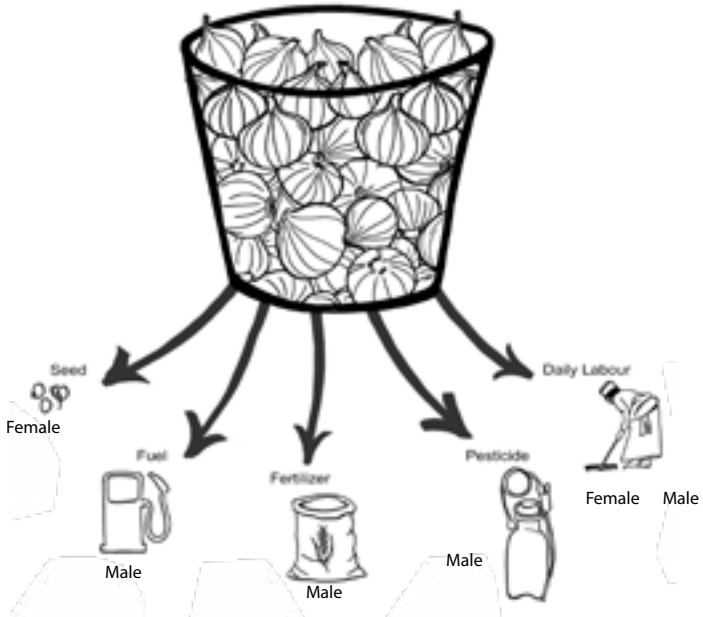


Figure 7: Mapping inputs and services for onion production (by gender)

Tip for groups with both men and women:

Men and women will often talk about different types of inputs and services. Women, for example, may not know the prices of fertilizers and pesticides because it is the men who go to town to buy them. Women may have more information on things like credit since there are many programs for women and micro-credit.

To draw attention to the different roles of women and men, you can draw a woman beside the inputs that are associated with women. You can draw a man beside the inputs that are associated with men. And you can draw both a man and a woman if the input can be associated with both men and women.

These kinds of discussions can be helpful in understanding where most of the work burden lies and who benefits most from a particular activity. You may want to ask probing questions to understand why men and women do certain tasks. Is it because of culture and tradition? Are women better at certain activities? Are men? Having these discussions will help to ensure that the activity is inclusive of both men and women and everyone benefits as much as possible.

3. List all of the input costs for this product in a table on another piece of flip chart paper.

4. Ask how much the average producer spends on each input or service in a season or year. The costs will vary from person to person, so use the group average. If the product is vegetables, for example, take the average land holding size of the group's members. Or if the product is livestock, take the average number of livestock per household of the group.

Here is an example of producers growing onions on an average land size of 0.25 hectare. Multiply the quantity by the price per unit to get the total cost as shown below:

Table 2: Calculating the cost of inputs and services for onion production

	Agricultural inputs	***Quantity***	***Unit price in ETB***	***Total cost in ETB***	***Paid***	***Value of unpaid family labour***
1	Seed (kg)	6	280	1680	1680	
2	Fuel (litres)	140	19.2	2700	2700	
3	Fertilizer: Diammonium phosphate (DAP) (quintal)	0.5	2600	1300	1300	
4	Fertilizer: Urea (quintal)	1	1000	1000	1000	
5	Other chemicals			2300	2300	
6	Oxen power (days)	7	182	1275	1275	
7	Daily labour (person days) for:					
	- land preparation and planting	10	30	300	150	150
	- application of fertilizers and chemicals	10	30	300		300
	- weeding and crop management	46	30	1380	600	780
	- crop protection	30	30	900		900
	- harvesting	26	30	780		780
	- outside labour for harvesting	42	30	1260	1260	
8	Irrigation			200		200
9	Transportation from farm gate to road side			300	300	
10	Maintenance cost for irrigation pump			300	300	
	Total cost for 0.25 hectare			**15,975**	12,865	3110

Tip: Producers often do not put a price on their own household labour because no money is exchanged as it would be if they hired a daily labourer. If producers do not place a value on their own time, then the cost of production is lower than it should be. This makes it hard for producers to make decisions about choosing one type of activity over another.

Help the group calculate the cost of unpaid labour to get the true value of the time and money it takes to produce a certain product. To do this, multiply the daily wage for labourers by the number of days each household member puts into this activity. Here is an example:

50 days of family labour spent on onions/year x 5 family members x 30ETB/day = 7500ETB

6. Once calculating the cost of production, it is important to note the exact time when those expenses occur in the production cycle. The next step is where we will learn to document this in form of a "product ledger".

   Table 3 is a sample ledger for the onion crop example.

- The first step is to list all the activities (preferably in chronological order) as they relate to the production of that crop. You can copy these activities from table 2.
- List the months in the next columns.
- Record the amount (in local currency) for each activity as it happens. Note there are two columns for each month. One is a budget (an estimate at the start of the season) and the other is the actual.
- The 'actual' column is further divided into two sub-columns to capture the labour expenses paid to external labour and to family members. While within the household there might not be real 'payment' for the work done on the field (let's say by women in the household) but it is important to capture the value of the time invested by the family member. The amount of labour put in each month multiplied by the daily wage rate should be the value written in this column, even if the amount is not 'paid'.
- Make a total at the end for each activity (horizontally) and for each month (vertically).

Table 3: Expenses in product ledger

Enter commodity: Onions F = Family labour E = External labour

Period Ending

Months	**Oct**			**Nov**			**Dec**			**Jan**			**Feb**			**Totals**		
Expenses (Ethiopian Birr)	Budget	Actual		Budget	Actual		Budget	Actual		Budget	Actual		Budget	Actual		Budget	Actual	
		F	E		F	E		F	E		F	E		F	E		F	E
Labour for land preparation	150															150		
Oxen	1275															1275		
Seedlings	1680															1680		
Labour for planting	150															150		
Fertilizer (DAP)	500			300			500									1300		
Urea	500						500									1000		
Chemicals							1000			1300						2300		
Labour for fertilizer and chemical spray	60			40			100			100						300		
Labour for weeding				180			700			500						1380		
Labour for crop protection	200			200			200			300						900		
Fuel				1000			1000			700						2700		
Maintanance of the pump										300						300		
Labour for irrigation				60			40			100						200		
Labour for harvesting										2040						2040		
Transportation										200			100			300		
Other																0		
Total Exp	**4515**	**0**	**0**	**1780**	**0**	**0**	**4040**	**0**	**0**	**5540**	**0**	**0**	**100**	**0**	**0**	**15975**		

7. Explain that the group has just calculated all of the costs of the inputs and services needed to produce a particular product. This is called "the cost of production". The next step will identify the markets where inputs and services are purchased.

Learning by doing: budget and actual

While the producers calculate the cost of production in Step Three only once as part of this methodology, the product ledger (Table 3) is meant to be used by the producers on an ongoing basis to record the actuals against the estimated budget. The ledger records will help serve multiple objectives including:

A. It will provide an account of actual farm level expenses on a single crop per season

B. It will help compare the actuals with the budget estimate

C. It will provide a cash flow at the farmers level which can be helpful in financial planning/developing suitable financial products (for MFIs and others)

D. It will help generate a discussion and learning amongst producers when they compare each other's ledgers at the end of the season.

This data collection should be continued by the producers on a regular basis every year. The ledgers may take a simplified form as a standalone document (like a farm field book/ pass book).

Optional Step:

Some facilitators find it useful to see how much the whole group or community spends on inputs and services because it is often much higher than producers thought. Seeing the total group amount can lead producers to think of ways to reduce the cost of inputs and services. For example, instead of buying inputs individually, they may see opportunities to buy in bulk.

To see how much the whole group spends on inputs, multiply the total cost of the inputs by the number of people who buy them, either in the group or in the whole community. Here is an example:

45 households in the group x 1600ETB/season for onion seedlings = 75,600ETB total for the group

Ask producers if they see any way to reduce the cost of production.

STEP FOUR: Mapping markets for inputs and services

What you will do:

- ✓ Find out <u>where</u> producers buy inputs and services
- ✓ Find out <u>why</u> producers buy inputs and services where they do

What you will need:

- ✓ Product Bucket (from Step 2)
- ✓ Inputs and services map (from Step 3)
- ✓ Flip chart paper
- ✓ Markers

Process:

1. Post a new piece of flip chart paper below the inputs and services that the group mapped in Step 3.

2. Draw a line coming from each input or service as shown below. For each arrow, list a place where people buy these inputs. These places are called "input markets". These markets can be described with text, pictures, or both. Here are some examples: agricultural office, unions, and input dealers.

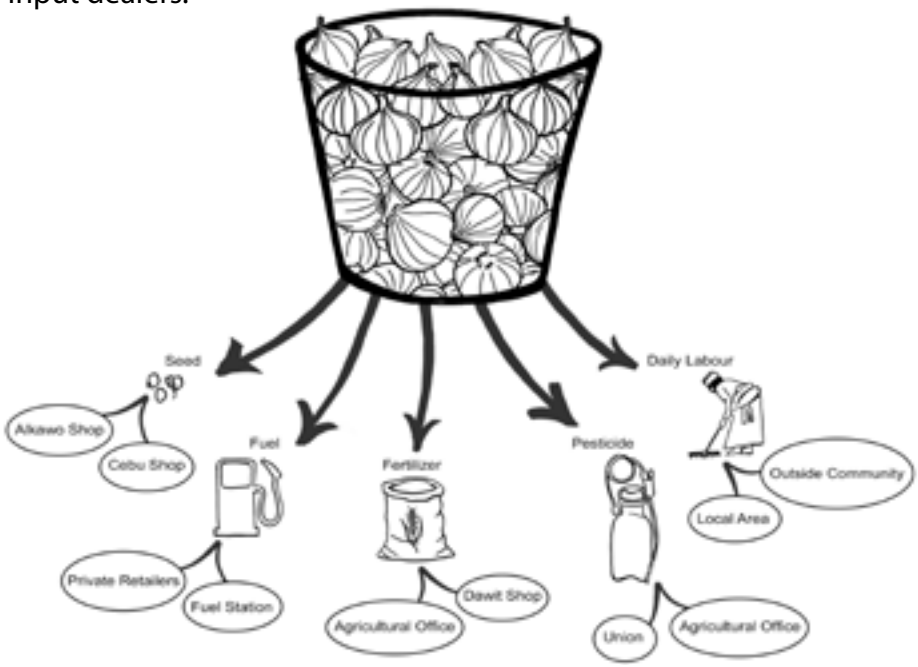


Figure 8: Market map for inputs and services for onions

3. Ask producers why they buy inputs or services from these people or places. Use the questions below to help get the discussion started.

   - Are input and service providers located close to home? Far away?
   - Is the price high or low?
   - Are inputs and services available when needed?
   - Are inputs and services of good quality?

4. Ask producers to put a smiling face beside the input or service providers that they like, a neutral face for those that are in the middle, and an unhappy face beside those whom they do not like.

Figure 9: Ranking inputs and services markets

5. Write down the information from these discussions on a separate flip chart. Here is an example:

Table 4: Ranking inputs and services markets

Type of input	***Where producers buy this input***	***Why producers buy inputs there***
Onion seed	Alkawo shop Cebu shop	Alkawo shop is best. Inputs are always available. The price is fair. The salesperson gives good advice.
Fertilizers	Agricultural office Dawit shop	Fertilizers are usually available at the agricultural office.
Fuel	Private retailers Fuel station	The fuel station sells at a cheaper price than the private retailers.
Pesticide	Vegetable producer's union Agricultural office	Producers' union buys pesticides in bulk and sells for a lower price, but it is located far away.

6. Explain that understanding <u>why</u> producers buy inputs and services where they do helps to identify actors that might offer support in the group's future activities. Ask group members if they see any opportunities to work more closely with any of the input and service providers listed above.

STEP FIVE: Mapping markets for sales

What you will do:

- ✓ Find out where producers sell the selected product
- ✓ Find out why producers sell where they do

What you will need:

- ✓ Product Bucket (from Step 2)
- ✓ Inputs and services maps (from Steps 3 and 4)
- ✓ Flip chart paper
- ✓ Markers

Process:

1. Place a new piece of flip chart paper on top of the Product Bucket.

2. Draw arrows coming from the top of the Product Bucket.

3. For each arrow, ask producers to name one place where people sell this product. These places can be described with text, pictures, or both. Here are some examples of places or people producers sell to: brokers, retailers, roadside sellers, wholesalers, traders, local markets, and Addis market.

4. As shown on the next page, write down the percentage of sales that go to each market.

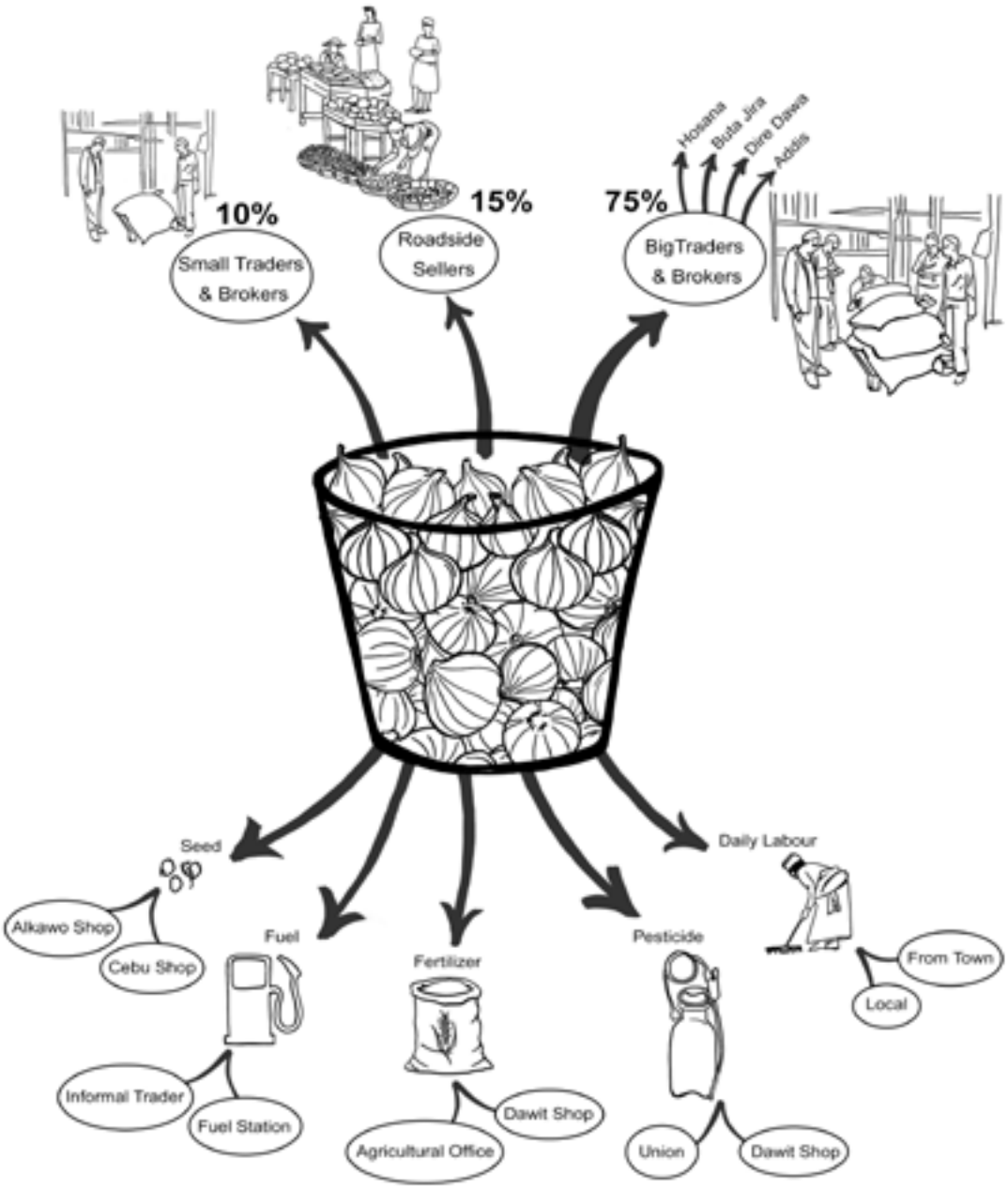


Figure 10: Mapping markets for the sale of onions

5. Try to get producers to think about where their product goes after they sell it. For example, in the bucket above, you will see that the big traders and brokers have their own markets where they sell onions. These are in Hosana, Buta Jira, Dire Dawa, and Addis.

6. The next exercise is to note how much revenue is earned through different sources.

   - First list all the buyers/markets/individuals/enterprises that the producers sell to. Example: onions sold to brokers, traders, directly to household consumers etc.
   - Write months to the columns on the right.
   - Record the amount earned from selling to different buyers for the corresponding month. Note there are two columns for each month. One is a budget (an estimate at the start of the season) and the other is the actual.
   - At the end of the season total the amount for each buyer and for each month.

Table 5: Revenues in product ledger

Enter product: Onions						
Period Ending						
Months	**Jan**		**Feb**		**Totals**	**Totals**
Revenue	**Budget**	**Actual**	**Budget**	**Actual**	**Budget**	**Actual**
Quantity sold to big brokers	15000		15000		30000	
Quantity sold to small brokers	3000				3000	
Quantity sold directly to customers (roadside)			5250		5250	
Total Revenue	18000	0	20250	0	38250	

7. On a separate piece of flip chart paper, ask producers to answer these questions for each market to which they sell. These questions will help guide discussions about why producers sell where they do.

Table 6: Ranking markets for the sale of onions

Market	Big brokers and traders	Roadside sellers
How often do producers sell to this market?	Daily	Daily
What is the price (per kg)?	Min: 5ETB/kg Max: 10ETB/kg Avg.: 7-8ETB/kg	Min: 4ETB/kg Max: 12ETB/kg Avg.: 8ETB/kg
How much do producers sell to this market?	Min: 10 quintals	Min: 2 quintals
Does the market have high or low quality standards?	High	Low
Are there any challenges or opportunities related to this market?	Brokers charge high fees. Producers have limited bargaining power.	Producers cannot sell in bulk. Producers have to pay for transportation, grading, and selling.
How would producers rank this market?	Producers prefer this market because brokers and traders pick up produce at the farm gate and buy in bulk.	Producers do not prefer this market because roadside sellers cannot handle large quantities and vegetables can spoil during transporting.

8. Explain that understanding <u>why</u> producers sell to certain markets helps to identify actors that might offer support in the group's future activities. Ask group members if they see any opportunities to work more closely with any of the market actors listed above.

STEP SIX: Meeting value chain actors and support actors

What you will do:

- ✓ Interview market actors and support actors
- ✓ Discuss ways to improve the efficiency of the value chain
- ✓ Gather extra information to complete the value chain maps and diagrams

What you will need:

- ✓ Meeting place
- ✓ Transportation
- ✓ List of questions to ask value chain actors and support actors (examples are provided in the appendix)

Process:

1. Revisit all of the value chain maps and diagrams. Make a list of all of the actors mentioned during the VCA: for example, brokers, unions, research institutes, credit providers, input dealers, retailers, wholesalers, extension services, and government offices.

   Definitions:

   The people or organizations directly involved in purchasing and selling products or services are called "value chain actors": for example, brokers and traders.

   The people or organizations that support the purchasing and selling of products or services are called "value chain support actors": for example, NGOs or microfinance institutions.

2. Explain that producers will now visit some of the actors identified in the maps and diagrams so they can ask them some questions.

3. Ask producers which actor they would like to visit most. Divide into groups accordingly.

4. Ask each group to come up with a list of questions they would like to ask this actor. Some specific questions for each actor are included at the end of the guide. Here are some general examples:

    - Which producers does this actor prefer? Why?
    - What are the major challenges this actor faces?
    - How could producers improve access to markets?
    - Are there opportunities for producers to work more closely with this actor in the future?

5. With a facilitator, each group should interview the chosen actor. This interview may happen in a meeting place, or producers may have to go to where the value chain actors or support actors are located, such as an input dealer shop, a roadside seller, or a union office.

6. When producers return from the interviews, ask one or two people from each group to report back and answer the following questions:

    - What did group members learn from the meetings?
    - Did anything surprise them?
    - Do they see any opportunities to improve the value chain?
    - Do they see any opportunities to earn more income?
    - Do they see any opportunities to work more closely with other value chain actors or support actors?

7. All of the maps should now be completed and posted in a central place. Ask producers if they have learned any new information that needs to be added? Does anything need to be changed?

8. Explain that the producers have successfully mapped the value chain for the selected product.

Note: some facilitators like to create more detailed value chain maps that include more market actors and their function. An example of a more detailed map is provided in the appendix.

STEP SEVEN: Identifying opportunities

What you will do:

✓ Come up with ideas to:

- increase production
- reduce the cost of production
- access new markets
- earn more income

What you will need:

✓ All of the maps and diagrams from Steps 1- 5
✓ Flip chart paper
✓ Markers

Process:

1. Review the value chain from start to finish.

2. Ask producers if they see any opportunities to earn more income from the selected product. Examples of opportunities may include:

   - coming together to buy inputs and to sell in bulk;
   - joining a union;
   - pooling money to buy machinery or technology: for example, buying irrigation equipment;
   - accessing training to help improve the quality of products;
   - accessing credit to buy better inputs or expand production;
   - working more closely with value chain actors;
   - adding value to their product by improving it in some way: for example, sorting or packaging.

   Note: With a facilitator, each group should interview the chosen actor. This interview may happen in a meeting place, or producers may have to go to where the value chain actors or support actors are located, such as an input dealer shop, a roadside seller, or a union office.

3. The commodity ledger for expenses noted at Step three; and the commodity ledger for income noted at Step five will help us analyze the cash flow of the farmer.

- Combine the commodity ledger of expenses and income as shown on the next page.
- Each month will have a negative, positive or zero balance.
- The table can be used for making comparisons of the actual and budgeted amount for each item.
- Discuss: why there is a difference, if any?

4. Write these opportunities down on flip chart paper.

Table 7: Product ledger showing revenues and expenses for a single product

Enter product: Onions																			
Period Ending																			
Months	**Oct**			**Nov**			**Dec**			**Jan**			**Feb**			**Totals**		
Revenue	Budget	Actual		Budget	Actual		Budget	Actual		Budget	Actual		Budget	Actual		Budget	Actual	
		F	E		F	E		F	E		F	E		F	E		F	E
Quantity sold to big brokers										15000			15000			30000		
Quantity sold to small brokers										3000						3000		
Quantity sold directly to customers (roadside)													5250			5250		
Total Revenue	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**18000**	**0**	**0**	**20250**	**0**	**0**	**38250**		
Expenses (Ethiopian Birr)																		
Labour for land preparation	150															150		
Oxen	1275															1275		
Seedlings	1680															1680		
Labour for planting	150															150		
Fertilizer (DAP)	500			300			500									1300		
Urea	500						500									1000		
Chemicals							1000			1300						2300		
Labour for fertilizer and chemical spray	60			40			100			100						300		
Labour for weeding				180			700			500						1380		
Labour for crop protection	200			200			200			300						900		
Fuel				1000			1000			700						2700		
Maintanance of the pump										300						300		
Labour for irrigation				60			40			100						200		
Labour for harvesting										2040						2040		
Transportation										200			100			300		
Other																0		
Total Exp	**4515**	**0**	**0**	**1780**	**0**	**0**	**4040**	**0**	**0**	**5540**	**0**	**0**	**100**	**0**	**0**	**15975**		
Profit/Loss	**(4515)**	**0**	**0**	**(1780)**	**0**	**0**	**(4040)**	**0**	**0**	**12460**	**0**	**0**	**20150**	**0**	**0**	**22275**		

Tip: the negative cash balance at the start of the season may indicate that the farmer may have borrowed the money or used his savings to buy the input. This is a good time to go deeper in understating the access to finance questions. You can ask the question like how will you come up with the cost from Oct-Dec when there is no revenue?

The table 7 suggests a total profit of ETB 22275. However in this calculation the family labor was not included as part of the expense and therefore the profit shown is not accurate. Often farmers do not include their own/family labor and think that they are making a profit. Hence it is important to include the family labor as part of the overall expenses in order to get the accurate profit/loss figure.

Some facilitators find it useful to bring a group of farmers who have been completing ledgers for the same commodity together to discuss what they learned from the process. This creates an opportunity for farmers to discuss what they learned from the differences between the budgeted and actual numbers and to look for ways they could work collectively to increase revenue or decrease expenditures.

5. Ask producers to divide these opportunities into two categories:

   - **Activities that producers can do right away:** These activities should not need much help from government offices or NGOs: for example, buying or selling in bulk or joining a union. Some people call these activities "low-hanging fruit" because they can be done without much help from value chain or support actors (they are the easiest fruits to pick from the tree).
   - **Activities that need support from outside agencies**: These activities are more ambitious and need contributions from both producers and supporting institutions like NGOs or government agencies: for example, buying processing or irrigation equipment. Some people call these activities "high-hanging fruit" because the activities are more complex (they are the hardest fruits to pick from the tree).

6. Explain that these opportunities will be presented to all of the actors that participated in the VCA at a validation workshop to see if there are ways that producers and value chain actors can work more closely together in the future.

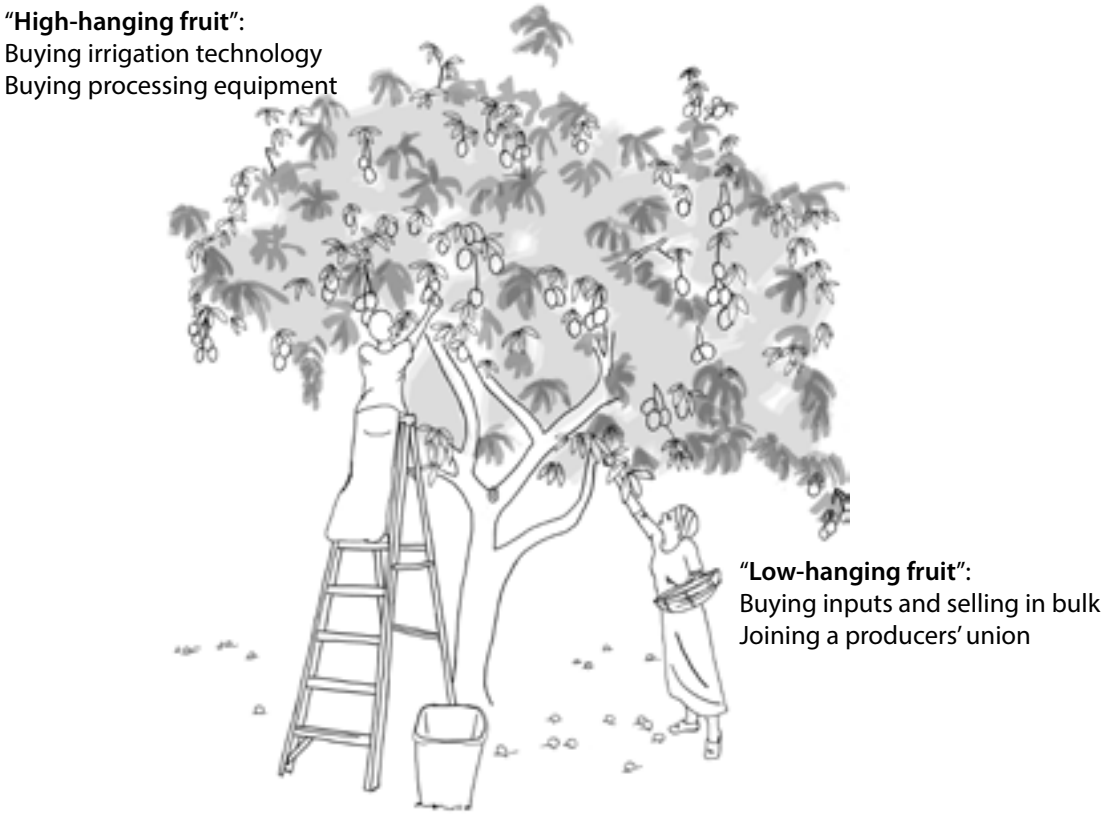


Figure 11: Identifying opportunities: Examples of "low-hanging fruit" and "high-hanging fruit"

STEP EIGHT: Validation workshop

What you will do:

- ✓ Present all of the value chain maps and diagrams to everyone involved in the VCA process
- ✓ Validate the findings
- ✓ Present the list of opportunities identified in Step 7 ("low-hanging fruit" and "high-hanging fruit")
- ✓ Plan a way forward

What you will need:

- ✓ All value chain maps and diagrams
- ✓ Flip chart paper
- ✓ Markers
- ✓ A place to meet

Process:

1. Invite everyone who participated in the VCA to a workshop to validate the findings. This workshop could include:

    - producers
    - cooperative members
    - union staff
    - input dealers
    - traders
    - brokers
    - NGO staff
    - government officials

- credit providers

2. As the field level facilitator, you can lead the workshop yourself. Or you may ask producers from the group to do it. Each step of the VCA should be presented, including:

   - Leaky Bucket
   - Product Bucket
   - Inputs and services maps
   - Market maps
   - Reflections on the interviews with value chain actors
   - A list of potential opportunities to improve the efficiency of the value chain

3. After the presentation, allow time for discussion and questions. Ask the group, value chain actors and other support actors if they see opportunities to collaborate on any of the activities presented.

NEXT STEPS: Detailed action planning

What you will do:

✓ Devise an action plan with clear roles and responsibilities

What you will need:

✓ List of opportunities from Step 7 ("low-hanging fruit" and "high-hanging fruit")

✓ Flip chart paper

✓ Markers

Process:

1. In the days or weeks following the validation workshop, you will need to do some detailed action planning with producers, value chain actors and other support actors. These actors could include input dealers, brokers, NGO staff or government extension offices.

2. Bring producers together and review the opportunities listed in Step 7.

3. Ask producers which opportunities they would like to focus on most.

4. Design a community action plan. Ask the group:

    - What will producers contribute?
    - What will outside agencies contribute?

    On the next page are two examples of action plans. The first example is for activities that can be done easily and immediately with locally available resources. The second example is for action plans that are more complex and require support from outside agencies.

Table 8: Action plan for short-term activities ("low-hanging fruit")

Activity	Buy inputs together in bulk	Join a producers' union
Steps	Discuss schedules and payments Decide who will negotiate and buy inputs from dealer Register group with government	Negotiate quality and quantity requirements with union leaders Register with the union
Estimated cost	9000ETB/household/onion season	200ETB/household
Community assets to contribute	Individual and group savings Profits from selling produce Negotiation skills Leadership	Household savings
Timeline	Immediately	2 weeks

Table 9: Action plan for long-term activities ("high-hanging fruit")

Activity	Buy PVC tubes for irrigation	Improve quality and quantity of onions
Steps	Mobilize household savings from group members Purchase tubes Hire community member for ongoing maintenance	Approach government extension officers, research institutes and NGOs to request agronomic training
Estimated cost	27,000ETB	To be determined
Community assets to contribute	45 households contribute 600ETB to buy PVC tubes 45 households contribute 20ETB/month for ongoing maintenance of PVC tubes	Labour Agricultural skills Land for demonstration plot
NGO assets to contribute	Training on PVC tube maintenance	Training
Government assets to contribute	Water table monitoring	Training
Timeline	6 months	1 year

Tip: Some facilitators find it useful to start with the "low-hanging fruit" action plan because it helps groups to build confidence in their own abilities and resources. Facilitators introduce the "high-hanging fruit" action plan later, when the group is more ready to take on more ambitious activities.

5. Ask producers to review their action plans. Do they have any questions or concerns before taking action?

6. Ongoing support and accompaniment is important. As the facilitator, you should ask yourself: is this something that I can support as an individual or through my organization? What commitments can I make to help producers move forward on their action plans?

References

Coady, M. (1939). Masters of their own destiny: The story of the Antigonish movement of adult education through economic cooperation. New York, NY: Harper & Brothers Publishers.

Cunningham, G. (2011). Community economic literacy and the leaky bucket. Antigonish, Canada: Coady International Institute. Retrieved February 20, 2014 from http://www.coady2.stfx.ca/tinroom/assets/file/OP9.pdf

Ghore, Y. (2015). Producer-led value chain analysis: The missing link in value chain development. Antigonish, Canada: Coady International Institute. Retrieved December 19, 2018 from https://coady.stfx.ca/wp-content/uploads/pdfs/IS3.pdf

International Labour Organisation (ILO). (2015). Value chain development for decent work: how to create employment and improve working conditions in targeted sectors / International Labour Office.- 2nd ed. - Geneva: ILO, 2015. Retrieved December 19, 2018 from https://www.ilo.org/wcmsp5/groups/public/---ed_emp/---emp_ent/---ifp_seed/documents/instructionalmaterial/wcms_434363.pdf

Appendix 1: Examples of interview questions for value chain and support actors

For input suppliers:

- What agricultural inputs do you sell?
- What are the top three products that you sell?
- On an average how many farmers buy from you per week/per season?
- What are the busiest months for you?
- How do you determine the selling price of different inputs?
- Do farmers buy more than one product from you (seeds, fertilizer, chemicals etc.)
- Where do you buy your own inventory from (who are your suppliers)?
- Do you get any credit from your supplier?
- Do you have competitors?
- Do the farmers pay you in cash?
- Do you provide inputs on credit to farmer?
- If yes, what are the terms?
- Do you provide any training or extension services for producers who buy inputs from you?
- Do you have required certification to run your business?
- What is your qualification? Any training on agriculture extension?
- What are the major challenges facing your business?
- Any suggestion for improvements in the value chain?

For credit providers:

- Do you provide credit for agricultural inputs and/or services?
- If yes, what are the products and what are the interest rates?
- Can you tell us the steps involved in processing of a loan, and its terms, such as the repayment schedule?
- Key constraints in lending if any?
- What are your challenges in extending credits to producers?
- Any suggestion for improvements in the value chain?

For government offices:

- What is the role of government in this value chain?
- What kind of services are provided to producers for the selected product?
- Current major program on agriculture
- Do you have any suggestions for making improvements in this value chain?

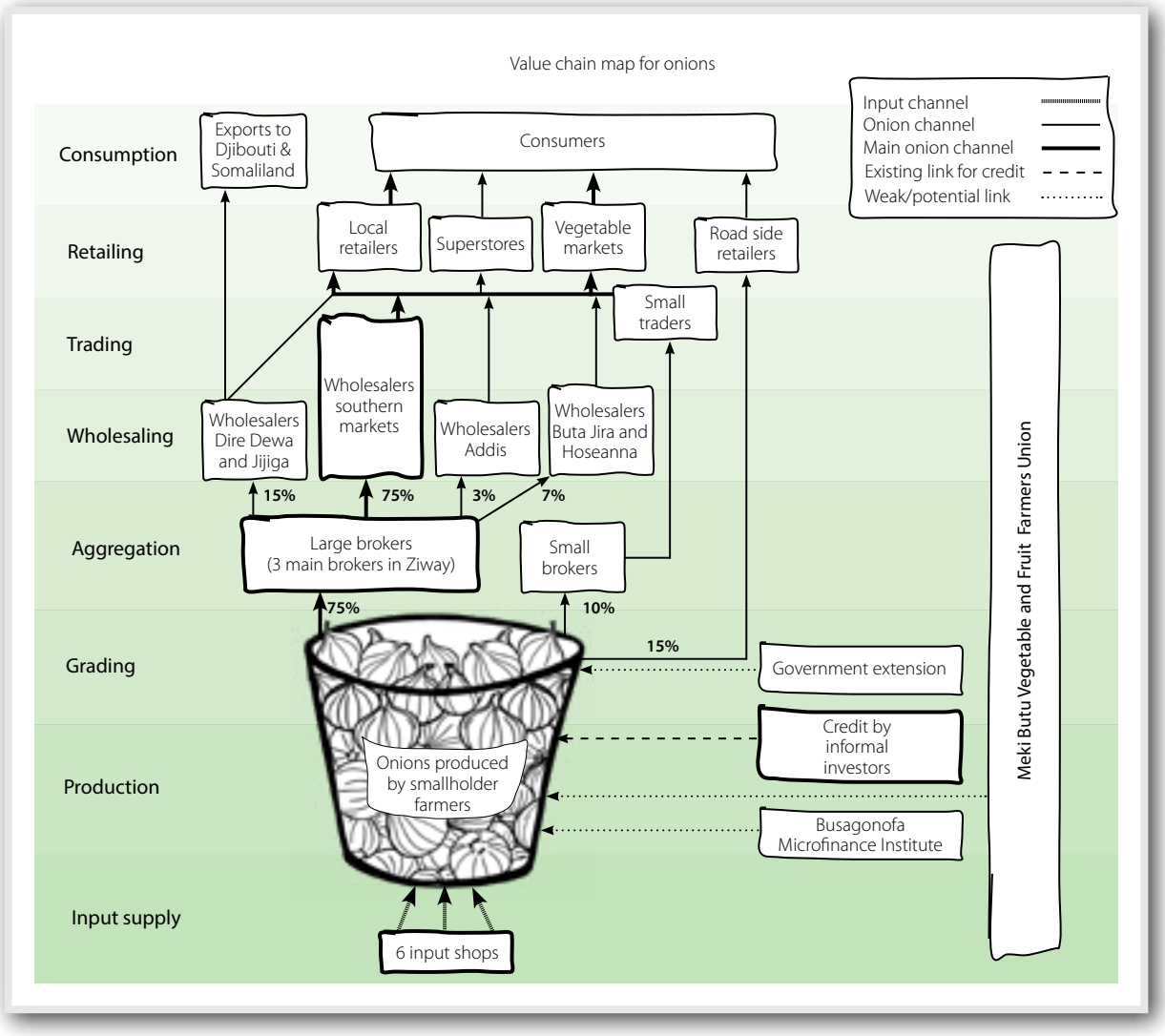
For unions:

- What services do you give to your members?
- What do producers have to do to become a member?
- What do members expect from you?
- Where do you sell your products?
- How is the role of the union different from other brokers and traders?
- Any suggestion for improvements in the value chain?

For brokers and traders:

- What are the main products that you sell?
- Who do you buy from?
- How much do you buy and sell each day or week?
- How do you decide the price you will pay to producers?
- What kind of demand exists for the product we have selected?
- Are there any challenges with this product?
- Who do you sell to?
- How do you learn about market demand?
- Do you add any value to the product before selling to the market?
- What are the differences (in terms of quality, quantity, price, risk and reliability of delivering on time) between the producers you work with?
- Do you buy directly from producers? If so, do you buy from individuals or groups?
- What kinds of services do you provide for producers who sell to you (inputs, seeds, credit, and technical advice)?
- As an important actor in the value chain what are your top challenges?
- Any suggestion for improvements in the value chain?

Appendix 2: Detailed value chain map



Source: Ghore, Y. (2015). *Producer-led value chain analysis: The missing link in value chain development*. Antigonish, Canada: Coady International Institute. Retrieved March 31, 2015 from http://coady.stfx.ca/tinroom/assets/file/IP1-PLVCA.pdf

COADY
INTERNATIONAL INSTITUTE
ST. FRANCIS XAVIER UNIVERSITY

Supported by

comart
FOUNDATION

Global Affairs Canada
Affaires mondiales Canada