Who and Where is Your Customer?

A playbook for conducting market assessments in the smallholder farmer context

March 2015
ABOUT FEED THE FUTURE PARTNERING FOR INNOVATION

Feed the Future Partnering for Innovation is a USAID program that helps the private sector to scale and market agricultural technologies for smallholder farmers through investing in technology commercialization and knowledge exchange. Partnering for Innovation is part of Feed the Future, the US Government’s global hunger and food security initiative, active in 19 countries. Fintrac produced this playbook in cooperation with Deloitte Consulting.

DISCLAIMER

This playbook was made possible with support by the American people through the United States Agency for International Development, under the terms of Cooperative Agreement No. OAA-A-12-00051, and managed by Fintrac Inc. The opinions expressed herein are those of the author(s) and do not necessarily reflect the views of the United States government.
As part of the commercialization process, Feed the Future Partnering for Innovation has developed a series of user guides designed to accelerate the commercial scaling of agricultural technologies. This series is designed to provide practical and actionable guidance in addressing the market entry and business development challenges that often arise when introducing and selling new agricultural technologies into the smallholder market.

The playbooks provide both the theory and practice for successfully introducing new products to the base of the pyramid market. In the following chapters we will introduce concepts that will assist you in developing products that are:

- **Adaptable**: Access difficult-to-find information on this marketplace that will help you understand the buying power of your targeted customers, identify where your customers are located, and determine the best partners and channels to most efficiently distribute your product.

- **Affordable**: Educate your customer on your proposition (the benefits of your product in relation to the cost), strategies to effectively demonstrate and promote your product, and strategies to sell it to community leaders and early adopters.

- **Accessible**: Explore financing options that you can offer to your customers to improve the upfront affordability of your product.

Figure 1: Entering and Succeeding in the Smallholder Market

This graphic illustrates the distinct phases of the smallholder business plan development process and in each playbook, highlights the relevant phases covered within, addressing three fundamental critical success factors of smallholder business: adaptability, affordability, and accessibility. The graphic demonstrates the iterative nature of each of these elements in business plan development.
# Contents

Qualifying & Quantifying the Business Opportunity 1  
Understanding the Customer 2  
  Why do you need to know your smallholder customer? 2  
  Customer Profile 3  
    Example A: Customer Profile 4  
    Activity 1: Profiling the Customer 5  
Moving Beyond the Customer Profile: Developing the Customer Journey 6  
Segmenting the Market 7  
  Example B: Customer Segmentation 8  
  Example C: Archetype 8  
Understanding the Context 9  
  The Size of the Market Opportunity 9  
    Activity 2: Calculating the Size of the Opportunity 10  
  The Business Climate 11  
Understanding the Competition 12  
  Example D: Competitive Assessment 13  
    Activity 3: How Does the Competition Measure Up? 14  
Finding Market Information in a Smallholder Context 15  
Market Assessment: an Input to the Business Plan 18  
Appendix 1: Potential NGO Partners 19  
Appendix 2: Existing Data Sources 19
The purpose of this playbook is to enable companies offering new technologies to evaluate who their customers are and what the business opportunity is in the market. By focusing on basic concepts of market assessment, including customer, business context, and competition, businesses commercializing new technologies in these markets will improve their strategic decision-making, focus, and resource use in ways that will increase the long-term prospects for growth and success. Developing a viable and investable business case will also be possible.

Market assessments are an important tool in understanding the size and scope of the commercial opportunity in a smallholder context. When done right, market assessments help optimize and focus investments, contribute to defining the value proposition, ensure improved commercial viability, and minimize business risk. The consequences of market-entry strategies that ignore or miss important market information will result in more costly startups, lower sales, slower scaling, and a greater risk of failure of the enterprise.

Beginning with the market assessment enables:

- An effective and logical segmentation of the market.
- An understanding of the unique needs and constraints of each segment.
- The ability to target and pursue the most appropriate segment.
- The adaptation of the product or service, including price, to meet these characteristics.
- The identification of a value proposition specifically tailored to this target market segment.
- The creation of an efficient and effective marketing plan, including communications strategy, demonstrations, and distribution.

**About this Playbook: Core Messages**

The purpose of this playbook is to enable companies offering new technologies to evaluate who their customers are and what the business opportunity is in the market. By focusing on basic concepts of market assessment, including customer, business context, and competition, businesses commercializing new technologies in these markets will improve their strategic decision-making, focus, and resource use in ways that will increase the long-term prospects for growth and success. Developing a viable and investable business case will also be possible.

Market assessments are an important tool in understanding the size and scope of the commercial opportunity in a smallholder context. When done right, market assessments help optimize and focus investments, contribute to defining the value proposition, ensure improved commercial viability, and minimize business risk. The consequences of market-entry strategies that ignore or miss important market information will result in more costly startups, lower sales, slower scaling, and a greater risk of failure of the enterprise.

Strategies presented here are:

- **Knowing your End Customer:** Understanding how to identify, prioritize, and address the needs of the smallholder farmer, including the fundamental principle that while each customer is unique, most of them recognize commercial value and investment returns and very often follow the leader.

- **Understanding your Context:** Knowing how to calibrate a business model to manage and overcome challenges and seize opportunities present in the broader setting to enhance business performance.

- **Assessing your Competition:** Being able to ascertain if and how a product or service offering can compete with other products on the market in terms of quality, price, availability, and service, as well as addressing customer apathy - the notion that the customer feels safer by doing nothing rather than taking the risk of trying something new.

This information is essential to developing a strategic and financial business plan as it ensures that the company knows who it is selling to, how it is selling, and what the unique selling proposition is compared to the competition.
Understanding the Customer

Why do you need to know your customer?

In general, evaluating the size and spending power of the market can help a company to hire and target its distribution and sales force, determine product pricing, plan for sufficient training and after sales support services, and estimate revenue and costs for supporting sales. In other words, the more information gathered about your customer, the better you will be able to estimate your costs and revenues to grow your business.

The Market Assessment: A market assessment helps you understand the targeted customers, the environment in which they make purchasing decisions, and the wider business environment in which the company must operate.

The Consequences of Conducting a Limited Market Assessment: An incomplete or poorly conducted market assessment could have the following consequences:

- **Loss of revenue:** Setting too low a price point reduces margins.
- **Lack of sales:** Setting too high a price point or developing an uninformed sales strategy could decrease sales.
- **Inadequate or overdeveloped sales and distribution:** Cost structure and associated infrastructure is either insufficient or overambitious given market demand, leading to lower sales or higher cost of goods sold.
- **Inadequate understanding of competition:** Failure to offer products differentiated from competitors or simply the status quo can result in market failure.

- **Regulatory Risk:** Regulations can either help or hinder product adoption and sales.

An understanding of the market includes both qualitative and quantitative aspects. Qualitative relates to an understanding of the smallholder customer and his/her behavior, and quantitative is an understanding of the potential number of customers as well as product costs and benefits.
Gathering qualitative and quantitative data on the smallholder segment can be difficult, time consuming, and expensive. Nevertheless, a modest understanding of the target customer will not only save time and money, but will ensure more effective targeting, pricing, and distribution. Having a plan typically leads to more efficient and structured research and data gathering. This presents a way of thinking about what information is needed when in the field and what types of questions should be answered. While this framework of five elements of customer profiling is used in all markets for consumer goods—including in developed economies—example questions relative to the smallholder segment are provided for guidance. Gathering complete information on all five elements may not be possible given resource constraints—time and money—to do the collection; if necessary, the elements can be prioritized as following: 1) demographic; 2) behavioral; 3) geographic; 4) psychographic; 5) sociographic. Companies that are able to fill out all five categories will have a deep understanding of who their customers are and how they live, information that can directly influence other business operations.

### Target Market

<table>
<thead>
<tr>
<th>Demographic</th>
<th>Behavioral</th>
<th>Sociographic</th>
<th>Psychographic</th>
<th>Geographic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Statistical aspects of the population (e.g., age, gender, education-level, etc.)</td>
<td>How a customer is addressing needs (e.g., benefits sought, loyalty, usage frequency)</td>
<td>Aspects of the individual customer (e.g., values, attitudes, influences)</td>
<td>Aspects that affect how decisions are made (e.g., personality, values, opinions, lifestyles)</td>
<td>Physical aspects (e.g., distance to markets, spacing within and among communities)</td>
</tr>
<tr>
<td>- What do they grow?</td>
<td>- How is a customer addressing current technical gaps?</td>
<td>- How does the customer perceive messages?</td>
<td>- How do community opinions influence decision making?</td>
<td>- Place customers on a map with aggregation points and key business locations</td>
</tr>
<tr>
<td>- What is their annual income?</td>
<td>- What is their Willingness to Pay?</td>
<td>- What values does the customer have that may affect responses to messaging?</td>
<td>- Does hierarchy factor into decision to purchase a product?</td>
<td>- Does the customer have transportation to get to market?</td>
</tr>
<tr>
<td>- Are there seasonal fluctuations in income?</td>
<td>- Who decides what to purchase and how?</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Figure 2: Elements of Customer Profiling

- **Demographic**: Statistical aspects of the population (e.g., age, gender, education-level, etc.).
  - What do they grow?
  - What is their annual income?
  - Are there seasonal fluctuations in income?

- **Behavioral**: How a customer is addressing needs (e.g., benefits sought, loyalty, usage frequency).
  - How is a customer addressing current technical gaps?
  - What is their Willingness to Pay?
  - Who decides what to purchase and how?

- **Sociographic**: Aspects of the individual customer (e.g., values, attitudes, influences).
  - How does the customer perceive messages?
  - What values does the customer have that may affect responses to messaging?

- **Psychographic**: Aspects that affect how decisions are made (e.g., personality, values, opinions, lifestyles).
  - How do community opinions influence decision making?
  - Does hierarchy factor into decision to purchase a product?

- **Geographic**: Physical aspects (e.g., distance to markets, spacing within and among communities).
  - Place customers on a map with aggregation points and key business locations.
  - Does the customer have transportation to get to market?
### Example A: Customer Profile

<table>
<thead>
<tr>
<th>Demographic</th>
<th>Behavioral</th>
<th>Geographic</th>
</tr>
</thead>
<tbody>
<tr>
<td>5-7 people per household (mother, father, 3-4 children, 1 grandparent): father literate and head-of household, 37 years-old</td>
<td>Patriarch makes purchasing decisions with respect to agricultural issues, but heavily influenced by other members of community</td>
<td>~20 kilometers from market (need space for grazing cows)</td>
</tr>
<tr>
<td>Grow maize on 1 hectare and raise dairy cows (quantity 5) and chickens for eggs.</td>
<td>Cows have lower than average production of milk; farmer unaware of low yield</td>
<td>Some villagers have motorbikes (fuel limited)</td>
</tr>
<tr>
<td>~$200/month income on average: 45% into crop production, 5% into livestock, 25% on food items, 15% on school fees, 5% donated to church and community, 5% remaining (Ability to Pay)</td>
<td>Risk-averse; must see a product in action and view positive impact of product to purchase</td>
<td>Village of 20 families</td>
</tr>
<tr>
<td>Income comes 40% in each of two flush seasons, timing dependent on weather conditions, and 20% over remainder of year</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Psychographic</th>
<th>Sociographic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community run by chief with democratic decision making at village level for group issues</td>
<td>Understands that hypothetically there may be improvements to status quo, but long process to be convinced of new methods</td>
</tr>
<tr>
<td>Success by one member of community looked on favorably, others seek to emulate</td>
<td>Responds best to direct communication of livelihood improvements – usually through higher income; health and education are secondary concerns to food and security</td>
</tr>
<tr>
<td>Value family and ability to provide for the family</td>
<td></td>
</tr>
<tr>
<td>Chief or member of his immediate family best person to target for early adoption</td>
<td></td>
</tr>
</tbody>
</table>
Activity 1: Profiling the Customer

Use this table to guide your market research and complete it as you gather data to arrive at a profile of your target customer.

<table>
<thead>
<tr>
<th>Demographic</th>
<th>Behavioral</th>
<th>Geographic</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Psychographic</th>
<th>Sociographic</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Next Steps

Upon successful completion of the customer profile and customer journey, you will be able to use this information to:

- **Establish a competitive price**: Differentiate your product in the market by ensuring your pricing strategy fits within the customer’s ability and willingness to pay.
- **Develop a viable distribution strategy**: Ensure an effective means by which to distribute the product to your customer.
- **Tailor your marketing strategy**: Know how to deploy your marketing resources efficiently, saving time and money, and helping generate sales.
- **Define after sales support**: Understand how to calibrate after sales support to the needs of your customers and optimize the associated costs.
- **Adapt the product**: Ensure that the product is tailored to the customer’s unique needs and behaviors and introduced in an effective manner.
Moving Beyond the Customer Profile: Developing the Sales and Marketing Plan

While the customer profile provides insights into a typical customer, the customer journey explains the process of mapping out the total customer experience across all the points between the customer and the business (particularly with respect to the product or service). In the smallholder context, this relates either to the process through which a smallholder farmer uses existing products or approaches or how she makes purchasing decisions.

For example, imagine the situation of a smallholder farmer experiencing a witchweed (striga) invasion in her field. What does the smallholder do?

- Does she first make several attempts at combating the witchweed with traditional solutions?
- If so, does she experience partial or complete crop failure as a result?
- At what point might the smallholder decide to experiment with an off-the-shelf solution?
- Where and how does she learn of the options available?
- Once she learns of the options, how long does it take before the smallholder makes a purchasing decision?
- Once purchased, how does she learn how to use the product effectively?

- Does s/he receive instruction, guidance or after-sales support?
- Does this support ensure that the product performs as it should?

These questions build on the customer profile and form the basis of understanding for the development of a customer marketing plan. It also allows you to customize some product features and put in place any needed after-sales training and services.
Segmenting the Market

One mistake that is often made in marketing to the base of the pyramid is assuming that the smallholder segment is one homogenous market. In fact, the base of the pyramid market is made up of a diversity of segments that may require different levels of investment in product mix, marketing, distribution, support services, and financing. Having acquired an understanding of the potential customer base, look for factors to allow you to further segment your targeted base, focusing on those that result in the largest groupings.

For each segment, a model customer can help to focus your thinking. While model customers are hypothetical characters, they are based on research and data and represent target customers. Each is a detailed profile of an ideal customer in a segment of the market and not intended to be an average of the most common customers. Rather, it should be the profile of a single customer with specific characteristics. As a company works through business planning – developing and adapting the product or service, determining the value proposition and how to communicate it, delivering the product or service to market, offering follow up training and service, etc. – it is helpful to have this model customer as a means to focus your sales strategy.

Most Common Characteristics for Segmenting the Smallholder Market

- Crop type (or animal if in livestock/poultry/aquaculture)
- Income level or ability to pay
- Size of land under cultivation by individual or community
- Proximity to market
- Rain fed or irrigated land
- Urban or rural population
- Purchasing behavior – either individually or by the community

For more information on smallholder market segmentation: [http://www.cgap.org/sites/default/files/Focus-Note-Segmentation-of-Smallholder-Households-April-2013_0.pdf](http://www.cgap.org/sites/default/files/Focus-Note-Segmentation-of-Smallholder-Households-April-2013_0.pdf)
Example B: Customer Segmentation

An Example of Customer Segmentation from the Global Alliance on Clean Cookstoves

This example begins with a divide between household and commercial, resulting in two large segments, then separates along the urban/rural divide in consumer groups and then by four average income groups, resulting in eleven total market segments.

Stove and fuel usage varies across households, based on situation and income levels; large volume cooking varies based on the size of the operation.

<table>
<thead>
<tr>
<th>Household</th>
<th>Commercial</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Rural Poor</strong></td>
<td><strong>Urban Poor</strong></td>
</tr>
<tr>
<td>8.2M Household</td>
<td>7.3M Household</td>
</tr>
<tr>
<td>Wood Users</td>
<td>Wood/Charcoal Users</td>
</tr>
<tr>
<td><strong>Rural Survivor</strong></td>
<td><strong>Urban Survivor</strong></td>
</tr>
<tr>
<td>6.6M Household</td>
<td>5.9M Household</td>
</tr>
<tr>
<td>Kerosene/Charcoal/</td>
<td>Kerosene Users</td>
</tr>
<tr>
<td>Wood users</td>
<td></td>
</tr>
<tr>
<td><strong>Rural Low</strong></td>
<td><strong>Urban Low</strong></td>
</tr>
<tr>
<td>Income Professional</td>
<td>Income Prof.</td>
</tr>
<tr>
<td>0 Household</td>
<td>1.4M Household</td>
</tr>
<tr>
<td></td>
<td>Kerosene Users</td>
</tr>
<tr>
<td><strong>Rural High &amp;</strong></td>
<td><strong>Urban High &amp;</strong></td>
</tr>
<tr>
<td>Medium Income</td>
<td>Medium Income</td>
</tr>
<tr>
<td>0 Household</td>
<td>0.3M Household</td>
</tr>
<tr>
<td></td>
<td>LPG Users</td>
</tr>
<tr>
<td><strong>Urban Rural</strong></td>
<td></td>
</tr>
<tr>
<td>$0-$1</td>
<td>$0-$1</td>
</tr>
<tr>
<td>Average Per Capita</td>
<td>$1-$10</td>
</tr>
<tr>
<td>Daily Income</td>
<td>$10-$50</td>
</tr>
<tr>
<td></td>
<td>$50+</td>
</tr>
</tbody>
</table>

Example C: Archetype

Abeo is a 28-year old illiterate male living in a rural Nigerian village supporting a family that includes a wife and three school-age children. He grows and harvests maize in two annual growing seasons on 2 hectares of land, resulting in a total average income of $275/month. However, this income comes in mostly in 2 flush seasons – 40% of annual income in each of the two harvest seasons and the remaining 20% spread out over the remainder of the year in “lean” seasons. The village is 20 kilometers from the nearest market and he does not have transportation. His children are in school during the day and assist him for two hours before and after school. His wife maintains the household, including fetching water, cooking and cleaning. She typically cooks with a mix of kerosene and charcoal, though often uses wood gathered locally to save money. According to the Nigerian Cookstoves market segmentation, as a “Rural Survivor” Abeo represents 22% of all rural households and 45% of all households.

2Global Alliance for Clean Cookstoves Presentation – Nigeria Market Assessment; sources of data: National Bureau of Statistics and Accenture analysis
Understanding the Context

With a good understanding of your customer, it is now possible to expand your view to the broader market landscape in order to estimate potential market demand.

The Size of the Market Opportunity

Measuring the market opportunity has two elements: volume and revenue. Calculating the number of sales a company expects to be able to capture in the market builds on the segmentation work completed in the qualitative phase of the market assessment.

Applying the expected price per unit to this volume results in an expected revenue potential. In this phase, it is important to remain realistic about how much of the market can be reached in a given timeframe.

Figure 3: Calculating the Revenue Potential of the Business

**Total Addressable Market**
Everyone who could purchase your product or service if they had access to it and the resources to purchase it. The total addressable market includes potential customers currently using competitors’ offerings.

Determining the size of the business opportunity in revenue terms is a process of narrowing down from the total addressable market to a smaller and smaller group of customers to pursue and serve. Once this quantity of product or service to be delivered is determined, the company applies the willingness to pay data to calculate potential revenue. Each step requires data gathered in the Understanding the Customer process as an input.
Activity 2: Calculating the Size of the Opportunity

Complete this workbook to calculate the size of the business opportunity in volume and revenue terms.

1. How many customers would potentially purchase your product if all conditions were optimal?
2. What percentage of the total addressable market is the segment you intend to pursue at this stage?
3. How much of this market do you think you can reach, especially considering marketing and geography?
4. Given your internal business operations, especially production and distribution, how much of this demand will you be able to meet?
5. How many units can you sell to each customer? (A customer could be a single person or a village, for example.)
6. For this segment, what is the willingness to pay for your product (i.e.: at what price will you sell your product at which people will purchase it)?
7. Multiplying the reachable market by the expected price for the product, results in the expected revenue potential.
8. Insert a percentage here, based on expanding geographic reach or increasing customer base within a market already served.
9. Insert a percentage here.
10. Insert a percentage here – as your product gains traction in the market, will you be able to charge a higher price?

Activity 2: Workbook: Calculating the Size of the Opportunity

Next Steps

Upon successfully quantifying the business opportunity, you will be able to use this information to:

- Ascertaining potential revenues: Calculate the total value of selling your products to the target customer segment.
- Understanding profitability requirements: Gain an understanding of the sales requirements required to exceed costs to generate net profit.
- Develop scenarios: Analyze how different sales and pricing assumptions impact on revenue forecasts and profitability expectations.
The Business Climate

In addition to understanding the size of the market opportunity, companies must take into consideration regulations that can impact the ability or speed that your enterprise can be launched. This knowledge informs business decisions, from whether or not to enter a market to where and how to manufacture a product. The chart below includes the most common issue areas and examples of potential implications for your business.

### Business Climate Considerations and Implications

<table>
<thead>
<tr>
<th>Issue</th>
<th>Questions</th>
<th>Implications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Workforce Readiness</td>
<td>• Is there an adequate workforce to manufacture and/or sell the product?</td>
<td>• Cost to train workforce if it is not skilled and time delays while training</td>
</tr>
<tr>
<td></td>
<td>• What is the skill-level of the available workforce?</td>
<td>• Legal requirements and constraints on expatriate labor</td>
</tr>
<tr>
<td>Tax Structure</td>
<td>• What is the current tax structure for the business?</td>
<td>• Increased price of product</td>
</tr>
<tr>
<td></td>
<td>• How are imports on inputs to the product or service (e.g., expatriate labor) taxed?</td>
<td>• Competitiveness of product if price increases</td>
</tr>
<tr>
<td></td>
<td>• Are there beneficial tax incentives or subsidies?</td>
<td></td>
</tr>
<tr>
<td>Infrastructure</td>
<td>• What is the condition and reliability of transportation and electricity infrastructure?</td>
<td>• Impacts on logistics and distribution and related costs</td>
</tr>
<tr>
<td></td>
<td>• What is the availability and condition of processing and warehousing facilities?</td>
<td>• Impacts on product operability and/or manufacturing reliability</td>
</tr>
<tr>
<td></td>
<td>• What is the availability and reliability of water supply?</td>
<td>• Impact on value chain efficiency and distribution</td>
</tr>
<tr>
<td>Incentives</td>
<td>• Are there fiscal and/or non-fiscal incentives that can benefit market entry and business development (e.g., subsidized pricing)?</td>
<td>• Changes in demand for product based on alignment with incentives</td>
</tr>
<tr>
<td></td>
<td>• Are there specific crops/stages of product that have been prioritized?</td>
<td>• Decrease in pricing if incentives significantly reduce costs</td>
</tr>
<tr>
<td>Labor Law</td>
<td>• What are the labor compliance expectations?</td>
<td>• Pricing decreases if incentives significantly reduce costs</td>
</tr>
<tr>
<td>Stakeholder Expectations</td>
<td>• How do local stakeholders view the company? The product?</td>
<td>• Potential partnerships with implementing agencies/ministries to increase adoption</td>
</tr>
<tr>
<td>Real Estate</td>
<td>• What are the legal conditions regarding real estate ownership or leasing?</td>
<td>• Effects on marketing and branding, an element of costs to operate</td>
</tr>
<tr>
<td>Donors</td>
<td>• What donor programs for agricultural and business development are present?</td>
<td>• Cost of compliance</td>
</tr>
<tr>
<td></td>
<td>• What are the current and future opportunities with these donor programs?</td>
<td>• Corporate governance changes</td>
</tr>
<tr>
<td></td>
<td>• Are donors providing investments to improve smallholder access to finance?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Are there specific financial instruments in development that could enhance business development?</td>
<td>Broader distribution of product or service</td>
</tr>
<tr>
<td>Market Conditions</td>
<td>• What is the capacity of the primary and secondary value chain actors?</td>
<td>• Ability to provide subsidized technical assistance</td>
</tr>
<tr>
<td></td>
<td>• What is the degree of smallholder aggregation and organization?</td>
<td>• Improved license to operate and credibility in smallholder ecosystem</td>
</tr>
<tr>
<td>Political &amp; Institutional Climate</td>
<td>• What is the political stability of the country?</td>
<td>• Access to additional financing opportunities</td>
</tr>
<tr>
<td></td>
<td>• Is corruption a major factor in the market?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• What is the ability of government agencies to enforce regulations and legal infractions?</td>
<td>Increased cost of financing in unstable political environments</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Compliance with international anti-corruption laws</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Increased risk to operating in country</td>
</tr>
</tbody>
</table>
Understanding the Competition

Understanding the competition in the market includes both direct competitors (e.g., another similar product), or an indirect competitor such as an alternative solution. An example of an alternative solution would be if a customer chose to sell grain immediately instead of using a storage technology. Another competing interest common in these markets is when potential customers prefer the status quo over trying a new product, feeling the risk of purchase is greater than the potential return. An analysis such as the one below can help you better understand the competition, specifically identifying:

<table>
<thead>
<tr>
<th>Critical Success Factors Key</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Competition</strong> Understanding the competition in the market includes both direct competitors (e.g., another similar product), or an indirect competitor such as an alternative solution. An example of an alternative solution would be if a customer chose to sell grain immediately instead of using a storage technology. Another competing interest common in these markets is when potential customers prefer the status quo over trying a new product, feeling the risk of purchase is greater than the potential return. An analysis such as the one below can help you better understand the competition, specifically identifying:</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Price</th>
<th>Low-Medium</th>
<th>Medium</th>
<th>Medium-High</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt;150% of average monthly customer income</td>
<td>100-150% of average monthly customer income</td>
<td>50-100% of average monthly customer income</td>
<td>20-50% of average monthly customer income</td>
<td>&lt;20% of average monthly customer income</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Accessibility</th>
<th>Only available in capital city</th>
<th>Available in large towns/market centers</th>
<th>Available from traveling vendors</th>
<th>Available through local kiosks</th>
<th>Available at farm level</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Brand Awareness</th>
<th>No users know brand</th>
<th>Few users know brand</th>
<th>Some users know brand</th>
<th>Most users know brand</th>
<th>Majority of users know brand</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Sales channel employed</th>
<th>Purchased directly from major company with no personal connections to smallholders</th>
<th>Purchased directly from major company that maintains own sales network</th>
<th>Purchased in market from sales representative</th>
<th>Sold through agents not part of community, with one-time advice offered</th>
<th>Purchase through local dealer known to community, offers advice and is trusted</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Market Share</th>
<th>&lt;5%</th>
<th>5-10%</th>
<th>11-15%</th>
<th>16-20%</th>
<th>&gt;20%</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Usability</th>
<th>Significant / repeated instruction required for proper use</th>
<th>Multiple instances of in-person or phone support needed for initial setup</th>
<th>Initial setup and use requires guide and/or on-call support</th>
<th>Can be set-up with simple guide</th>
<th>Easy to use without any instruction</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Inputs required</th>
<th>2+ inputs/quarter or 7+ inputs annually</th>
<th>3 inputs twice/yr or 5-6 inputs annually</th>
<th>2 inputs twice/yr or 3-4 inputs annually</th>
<th>1 input twice/yr or 2 inputs annually</th>
<th>1 input annually</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Production Output (of crop)</th>
<th>Same amount as no intervention</th>
<th>&lt;25% more than no intervention</th>
<th>25-75% more than no intervention</th>
<th>75-100% more than no intervention</th>
<th>&gt;100% more than no intervention</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Technical Assistance</th>
<th>none provided</th>
<th>1 time/year</th>
<th>1 time/quarter</th>
<th>1 time/month</th>
<th>2+ times/month</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Financing</th>
<th>No financing available to assist with purchasing product</th>
<th>Lenders suggested but not facilitated by company, thus typically unattainable</th>
<th>Consumer finance/lending facilitated by company, but with no grace period</th>
<th>Consumer finance with short grace period</th>
<th>Consumer finance with significant grace period</th>
</tr>
</thead>
</table>
### Example D: Competitive Assessment

<table>
<thead>
<tr>
<th>Competitors</th>
<th>Irrigation Company 1</th>
<th>Irrigation Company 2</th>
<th>Irrigation Company 3</th>
<th>Nature (rain/drought)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Critical Success Factors</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Price</td>
<td>Low-Medium</td>
<td>Low</td>
<td>Medium</td>
<td>High</td>
</tr>
<tr>
<td>Accessibility</td>
<td>Low-Medium</td>
<td>Low</td>
<td>Medium</td>
<td>High</td>
</tr>
<tr>
<td>Brand Awareness</td>
<td>Low-Medium</td>
<td>Low</td>
<td>Medium</td>
<td>High</td>
</tr>
<tr>
<td>Sales channel employed</td>
<td>Low-Medium</td>
<td>Low</td>
<td>Medium</td>
<td>High</td>
</tr>
<tr>
<td>Usability</td>
<td>Low-Medium</td>
<td>Low</td>
<td>Medium</td>
<td>High</td>
</tr>
<tr>
<td>Net income change</td>
<td>Low-Medium</td>
<td>Low</td>
<td>Medium</td>
<td>High</td>
</tr>
<tr>
<td>Technical Assistance</td>
<td>Low-Medium</td>
<td>Low</td>
<td>Medium</td>
<td>High</td>
</tr>
<tr>
<td>Financing</td>
<td>Low-Medium</td>
<td>Low</td>
<td>Medium</td>
<td>High</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Low</th>
<th>Low-Medium</th>
<th>Medium</th>
<th>Medium-High</th>
<th>High</th>
</tr>
</thead>
</table>

1. Actual companies, though names have been masked
2. Company 1=$350, Company 2=$288, Company 3=$1,967; prices for Company 3 are on average basis.
3. On farmers’ net income basis.
Activity 3: How Does the Competition Measure Up?

1. Complete the critical success factors on the left side. These are elements at which the product and business must excel to be successful in the chosen target market. Reference the suggested smallholder market critical success factors and corresponding key, though others should be considered as relevant to the product or business.

2. List your product and then competing products or solutions across the top. These can be current ones or those the company expects will launch soon; also include the alternatives, such as “do nothing” (i.e. not addressing the problem or doing so without purchasing a specific solution).

3. Following the key (or adjusting the meanings of Low-High to better align with your business), in each cell insert the ball that corresponds with how the product compares with the competition. In cases where there are multiple responses (e.g., a competitor uses multiple sales channels), rate the product based on the best level offered.

This chart, when completed, will illustrate the company’s strengths and weaknesses.

Next Steps
Upon successfully mapping your competitive landscape, you will be able to use this information to:
- **Develop a value proposition that is different from and better for your target clients than that of your competition:** Understand how your product will need to be different to be competitive in the marketplace.
- **Be better able to target your market niche:** Identify geographic, functional, and/or operational gaps that may inform market entry, distribution, and marketing strategies.
- **Develop a pricing strategy most appropriate to your customers:** determine the type of value to provide to the customer (pricing and customer experience).
- **Identify partners that can improve your prospects for success:** Consider if and how to partner with adjacent or associated actors to address a wider customer segment or to offer bundled services.
Finding Market Information in a Smallholder Context

Finding data and methods for researching the customer’s purchasing process, including understanding the smallholder farmer segment, is challenging but there are some good data sources available if you know where to look. These sources, discussed below, can provide a baseline understanding of the market. The quality and the scope of information increases as more resources and time are invested in studying the market and target customers. Local business leaders, NGOs, donor projects, government offices, and community groups, among others, can be helpful as primary data sources for new market entry. These four levels of information and the tools associated with each exhibit varying depths of research; the level of depth a company goes into depends mostly on the amount of time and resources the company can and wants to invest into this stage.

**Figure 4: Levels of Data Gathering Sufficiency**

- **1. Existing market data**
- **2. Conversations with Customers; Collaboration with Local Partners; Surveys**
- **3. Voice of Customer**
  - An analytically rigorous and intentional strategy for focus groups: conducting interviews with customers and representatives along the supply chain (e.g., dealers and finance providers) to share information about existing products, the market and gaps.
- **4. Ethnography**
  - The optimal approach for market research, aimed at understanding how people live their lives through in-person observations, in the best cases including multi-day immersions with the target customers.
Finding Market Information in a Smallholder Context

1. Basic market information
At a minimum, a market assessment includes understanding the demographic data and needs of the target customer, the laws and regulations governing the market, the total addressable market, typical customer characteristics and the geographical location of the market that would be a good entry point for the company, and competing products available in the market.

2. Good
A good understanding of the market includes demographic, behavioral, and geographic data on the customer, information that typically requires only limited primary research in most countries. This should include knowing how geographically dispersed our customers are, how they get to market to purchase products and what value your product offers the customer. Some differences in your customer characteristics are described. The total addressable market can be narrowed down into those who should be targeted as early adopters/leaders that are interested in trying out the product. If this information is not available in existing sources, surveys or discussions with small groups could be considered. Local NGOs have deep roots in communities and are typically good sources of basic information or can be available to conduct research for a small fee.

3. Better
The third level of market assessment moves into the realm of knowing how customers make decisions and how they value trade-offs. You should know what laws and regulations, including pending ones, may impact your go-to-market strategy. Are there programs available – donor, academic or other – that may be available with which to collaborate? At this level, the business will have spent time with the community talking with both individuals and with groups, including conducting market surveys and focus groups.

4. Optimal
There is no limit to the amount of data that a business can collect on customers, and as you sell your product in the marketplace, this learning continues. However, in an ideal market assessment, the company will grasp the differences in individual and community decision-making and the roles of household and community leaders in decision-making. This can include other market entry examples of other products, allowing for more accurate forecasting of future market size and timing of growth. In this stage, you will have spent significant time with the customers to understand how they live their lives and be able to better target your messaging/marketing, sales force, and product offering.
Start with existing data

- World Bank Living Standards Measurement Study: Household level poverty data, expenditures by urban/rural households; typically updated annually.
- United States Department of Agriculture (USDA) Foreign Agricultural Service: aggregates export data for each crop on a national or regional level.
- National Ministries of Agriculture collect and report on agricultural production.
- Grameen Foundation’s Progress out of Poverty Index: Household poverty data for 150+ countries.
- Census data from the national government provides insights into demographics.
- Ministries of Agriculture (or corresponding local agencies) often have soil type maps, which can narrow down where specific crops are grown within a country.
- Additional resources available in Appendices 1-2.

*NB: Be sure to consider if this information is relevant; it is easy to be biased because it is easily available.

Once a business has a basic understanding of the market through secondary research, a plan for diving deeper can assist with guiding on-the-ground research. There are many market nodes that may provide efficient access to numerous customers.

- **Aggregation points**
  Grain warehouses, collection centers, and other points to which producers bring their products for storage and/or sale are a fast way to reach a specific group of potential customers. Additionally, the staff working at the aggregation points can be helpful in providing an alternate perspective on this segment of consumers.

- **Community Meetings**
  Farmer associations and other community meetings often bring together many potential customers in a single location and offer insight into how the community makes decisions.

- **Middlemen**
  Distributors and dealers along the sales chain understand the target customers and can provide insights into both qualitative information and quantitative (willingness and ability to pay).

- **Non-Government Organizations**
  In many cases, NGOs have a unique understanding of target customers and consequently can be very good enablers for business building. These NGOs have typically been operational in the location for a long time and have built trust with the consumers. Agribusinesses can partner with them for gaining information and subsequently other business functions. See Appendix I for a list of many that are active in BoP markets and frequently collaborate.

- **Universities**
  Often local universities have either conducted primary research in the local markets and populations, or have collated secondary information for thesis research and will allow public access. Additionally, many students can assist with field research given the increased likelihood of local populations to trust them; professors may serve as subject matter experts, especially on regional agriculture and meteorological conditions.

- **Private Companies**
  There may be other private companies operating in the target market that have information on the target customers. These companies may be amenable to teaming with other businesses to share data in ways that are mutually beneficial. Mobile phone companies are a wealth of information on demographic information and may be amenable to sharing data for a one-time fee or at no cost.

- **Non-Government Organizations**
  In many cases, NGOs have a unique understanding of target customers and consequently can be very good enablers for business building. These NGOs have typically been operational in the location for a long time and have built trust with the consumers. Agribusinesses can partner with them for gaining information and subsequently other business functions. See Appendix I for a list of many that are active in BoP markets and frequently collaborate.

- **USAID and other donors**
  International aid agencies can be a helpful resources for identifying resources and studies given their work in the markets.

Demonstration sites, which will be described in more detail in a later playbook as an important part of marketing strategies, can also be very helpful in collecting information on a target market. A demonstration site is typically located in a well-traveled area or at a previously established aggregation point that attracts farmers and facilitations one-on-one interviews and focus groups from which data can be collected.
Conducting this thorough market assessment of the customer and broader landscape is key because it flows through to nearly every other business function. Understanding customers and the market landscape affects:

- The adaptation of the product or service, especially in the smallholder market where it is best that the product or service is tailored to the customers’ requirements and constraints, which are understood through the market assessment. Companies may go through several rounds of adaptation, during which they return to the market for further refinement of the assessment.

- Resources – both human capital and otherwise – to devote to selling the product or service, part of marketing and value proposition, based on the company knowing how and where the customers make purchases.

- The extent of training and post-purchase support needed, also part of marketing and value proposition.

- The price of the product or service, which impacts financing and affordability decisions, determined through understanding the customer’s willingness and ability to pay.

- The decision of which segment to pursue and how – the plan for market entry.

- Expected market growth over time.

Combining all of these elements into a Go-to-Market strategy results in a comprehensive business plan for successfully delivering the product into the hands of the customer in a way that meets business objectives.

Finally, a market assessment is never completely finished. As a product or service is introduced into the market, additional information will be gathered through marketing, sales, and training. It is important to continue considering how this new information might influence future iterations of an offering or how the company brings it to market. Flexibility is a key skill to operating in the smallholder farmer market.

Figure 5: Market Assessment as a Business Plan Input

This playbook, Qualifying and Quantifying the Market Opportunity is part of a multi-playbook series aimed at assisting companies interested in commercializing and scaling agricultural technologies for smallholder farmers. Subsequent playbooks will cover Defining and Communicating the Value Proposition and Affordability Models for the Smallholder Market.
Appendix 1: Potential NGO Partners

This list includes many of the NGOs that are active in base of the pyramid markets, and work with smallholder farmers. If active in a specific geography, they may be helpful in providing household-level data on customers, helping reach local communities for market research, or collaborating to distribute a product or service.

Abt Associates
http://www.abtassociates.com/
ACDI/VOCA
http://acdivoca.org/
Acumen
http://acumen.org/
Ashoka
https://www.ashoka.org/
Bill and Melinda Gates Foundation
http://www.gatesfoundation.org/
CNFA
http://www.cnfa.org/
Endeva
http://endeva.org/
Food and Agriculture Organization (FAO) of the United Nations
Heifer International
http://www.heifer.org/
iDE
http://www.ideorg.org/
infoDev
http://www.infodev.org/
International Food Policy Research Institute (IFPRI)
http://www.ifpri.org/
Landesa
http://www.landesa.org/
Mercy Corps
https://www.mercycorps.org/
One Acre Fund
http://www.oneacrefund.org/
Opportunity International
http://opportunity.org/
Root Capital
http://www.rootcapital.org/
SNV
www.snvworld.org/
Technoserve
www.technoserve.org/
Grameen Bank
http://www.grameen.com/
Brac
http://www.brac.net/

Appendix 2: Existing Data Sources

In addition to the sources listed in the document, these resources often have market data – for example of trade statistics and production quantities – that companies can access for free or for limited fees. These sources are focused more on the market-level rather than the household-level.

**PRICE DATA**

East African Grains Council
http://www.eagc.org/
Esoko
https://esoko.com/
FAO PriceStat
http://faostat3.fao.org/browse/P/*/E
FAO’s International Price Monitor
http://www.fao.org/gIEWS/english/gfpm/index.htm

**FEWS Net**

http://www.fews.net/
**GIEWS National Basic Food Prices**
http://www.fao.org/gIEWS/giews/pricetool/
Intercontinental Exchange
https://www.theice.com/index
International Monetary Fund Primary Commodity Prices
The Rice Market Monitor
South African Grain Information Exchange  
http://www.grainsa.co.za/  
Thomson Reuters Eikon Commodities  
United States Department of Agriculture GAIN  
http://gain.fas.usda.gov/Pages/Default.aspx  
World Bank Pink Sheets  
http://go.worldbank.org/4ROCCIEQ50  
National Ministries of Agriculture  
National Commodity Exchanges  

TRADE FLOWS

European Commission’s Eurostat  
http://ec.europa.eu/eurostat  
FAOSTAT  
http://faostat3.fao.org/home/E  
International Trade Center  
http://www.intracen.org/itc/market-info-tools/  
United Nations COMTRADE  
http://comtrade.un.org/  
World Customs Organization  
http://www.wcoomd.org/  
National Customs Agencies  
National Ministries of Trade  

PRODUCTION

FAOSTAT  
http://faostat3.fao.org/home/E  
FAO GIEWS Food Outlook  
International Grain Council  
Martell Crop Projections  
http://www.martellcropprojections.com/  
United States Department of Agriculture World Supply and Demand Analysis (WSADE)  
http://www.usda.gov/oce/commodity/wasde/  
National Ministries of Agriculture  
Local Trade Associations  

ANALYSIS OF AGRICULTURAL MARKETS

Africa Development Bank  
Agricultural Market Information System  
http://www.amis-outlook.org/  
Alliance for a Green Revolution in Africa  
http://agra-alliance.org/  
Asian Development Bank  
http://www.adb.org/sectors/agriculture/main  
GIZ  
http://www.giz.de/expertise/html/3354.html  
Inter-American Development Bank  
International Food Policy Research Institute  
http://www.ifpri.org/  
International Fund for Agricultural Development  
http://www.ifad.org/  
Technical Center for Agricultural and Rural Cooperation  
USAID  
The World Bank  
National Ministries of Agriculture  

LOCAL STANDARDS

International Organization for Standardization  
http://www.iso.org/iso/home.html  
WTO Standards Enquiry Points  
https://www.wto.org/english/tratop_e/tbt_e/tbt_enquiry_points_e.htm  
National Bureaus of Standards  

Monetization Field Manual, USAID Office of Food for Peace Title II Programs. Revised October 2012.