



Wallace Center
AT WINROCK INTERNATIONAL

Value Chain Coordination Quicksheet

Evaluating Economic Outcomes

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Value Chain Coordination is a market-based approach to developing local and regional food systems that better serve communities. Value chain work includes the development of collaborative ties among businesses along the food supply chain, with the expectation that the economic position of these supply chain members improves.

This Quicksheet considers strategies that Value Chain Coordinators (VCCs) can use to report the economic outcomes related to their work.

**The methods presented are based on
the author's work with a cohort of VCCs associated with
the 2016-2018 USDA-funded Food LINC program.**

In this Quicksheet we assume that sales and net revenue are the most highly desired measurable economic outcomes. We assume the value chain work is being done by a non-profit, social enterprise, or government entity. This reflects the composition of the members of the 2016-2018 Food LINC cohort. Food LINC (Leveraging Investment for Network Coordination) was a USDA initiative supporting 13 VCCs working within existing food system development organizations. The organizational members included social enterprise food hubs with aggregation and distribution facilities; and non-profits and governmental agencies (e.g., mayor's office, council of government).

The Value Chain Approach

Food system development using a value chain approach has most often meant that a non-market actor, typically a staff member or consultant

This QuickSheet uses the following definition of ***food value chains***:

Food value chains represent a business model in which producers and buyers of agricultural products form strategic alliances with other supply chain actors, such as aggregators, processors, distributors, retailers, and consumers, to enhance financial returns through product differentiation that advances social or environmental values.

*Source: Diamond, Adam, Debra Tropp, James Barham, Michelle Frain Muldoon, Stacia Kiraly, and Patty Cantrell. **Food Value Chains: Creating Shared Value to Enhance Marketing Success.** U.S. Dept. of Agriculture, Agricultural Marketing Service, May 2014. Web.*

associated with a non-profit, supplies the organizational capacity and facilitation work to do the following:

- Gather information on the food business landscape in an area
- Directly provide or link food business actors to appropriate resources and training to enable the development of business relationships
- Provide ongoing support and follow-up as these actors begin working together and seek to strengthen business ties
- Summarize and share lessons learned to expand the work

Finding Economic Outcomes

Although the value chain approach includes advancing social and environmental values, the chain can only exist if the businesses comprising the chain are economically viable. If a value chain is “working”, we should see positive economic outcomes for the members of this chain. This includes farm businesses, which are typically the primary target of value chain work. Improving the economic viability of small and mid-sized “farms of the middle”—those farming operations too small to easily enter into conventional retail and food service channels, and too large to survive by selling only direct-to-consumer—has been a major focus of value chain work. This work can also prioritize specific types of farms. For example, some value chain projects focus on improving the position of urban farms, minority-owned farms, cooperatively owned farms, etc.

Evidence that an economic outcome is attributable to a value chain activity, such as a networking event for farmers and buyers, means having data on the economic measures, such as sales, before and after the activity. (Even with this data, keep in mind that VCCs can claim their work contributed, not caused, the outcome. See the sidebar *Attribution vs Causation*).

The major challenge for value chain coordinators lies in the “how” of tracking economic outcomes, most often the dollar value of transactions between business partners. Factors that impact this ability include:

- Businesses may not keep reliable sales figures
- Businesses are not eager to share sales figures with external groups and often will not do so
- Pressing a value chain member to share sales figures can damage the VCC’s ongoing relationship with this partner
- If a VCC takes “credit” for a business success, this can be demoralizing for the business, or other individuals who also contributed to this success

- Understanding the proportion of a change in sales that is attributable to the work of a VCC is difficult (if not impossible) to reliably calculate

Reaching a positive economic outcome attributable to the work of value chain coordination can take months if not years. Depending on the market environment and skills of the VCC, it may take most if not all of the first year or two of a project simply to establish trust and needed competencies to bring growers and buyers together, and to identify value chain initiatives that are seen as mutually beneficial by all concerned. Seasonality and the vagaries of weather (think hurricanes and drought) and personnel changes (such as changes in key buyer contacts) can result in significant setbacks. This makes reporting outcomes of the work, especially when supported by short-term grant funding, particularly difficult.

And yet, despite all of this, VCCs very often *must* quantify the economic impact of their work, usually because their positions, whether grant-funded or not, are predicated on the assumption that some measure of economic improvement will be achieved.

What Can be Measured, and How?

Evaluation relies on a set of common terms, some of which are included in an oft-used project planning tool, the *logic model*. A logic model connects inputs or resources to a set of activities and outputs, which are expected to result in outcomes that represent attainment of a project goal. Example inputs are staff time and grant funds; activities and outputs could be training workshops or networking events; example outcomes are changes in skills, behaviors, or resources. The most common economic outcome considered in value chain development is the change in sales or profitability of a value chain business. We know that collecting this data is a challenge, for the reasons mentioned above.

How can we increase the likelihood that economic data can be measured and tracked over time? If the data cannot be tracked, what's the next best thing?

Attribution vs Causation

VCCs engage in numerous activities to create local/regional food markets and increase food business income, including: matchmaking individual growers and buyers, convening events to encourage business-to-business relationships, training and resource prospecting. Seeing a business relationship develop is one of the most gratifying end-results of value chain coordination. Yet even when the contribution of the VCC to business success is clear, without a *counterfactual*—evidence of what would have or have not happened without the VCC's contribution—VCCs cannot make claims that their work *caused* an outcome. VCCs can and should note their work using the phrasing *attribution* and *contribution*: that their value chain activities contributed to the creation of new markets, business relationships, and improved economic outcomes for value chain participants.

How to Increase the Likelihood that You Can Track Economic Data

Be Realistic

The most prized economic metric is the dollar change in producer profitability. It's also the most difficult metric to track. It assumes that the farm or other business is both willing and able to report accurately on their costs, returns, and therefore profit. A next-best measure is change in sales, and the least useful measure is a change in volume, such as pounds or gallons; both sales and volume are poor measures of profitability, since farms could increase either without increasing profit.

Businesses are likely to be more willing to share *percent* changes: in volume sold (least desirable measure), sales (next-best), and profit (ideal). One strategy can be to pair a weaker *quantitative* measure such as volume sold or sales with a more *qualitative* measure of profitability. For example, consider this question posed to growers: "Think about your business over the past year, compared to the year prior. Would you say that you are (1) not breaking even (2) barely breaking even (3) making a small profit (4) making a good profit." For reporting purposes, a VCC could include both the aggregated change in volume sold for all farms, and a summary of self-perceived change in profitability. Again, this is not the ideal, but is a next-best, doable, approach. Note that the measures you use can change over time as you build trust with the value chain partners.

Be Specific

Define the Actors The degree to which a VCC can collect accurate economic measures related to value chain coordination depends on the degree to which the value chain actors and products are specified. The more the VCC specifies who is selling, who is buying, and what product is being produced/purchased, the better equipped the VCC is to collect economic measures. For example, a value chain project that has the goal of "increasing produce sales for small-scale farmers" should drill down to specify (a) the produce items (a list of these) (b) the set of farmers (the names of these). Naturally, this level of specificity is often *not* known at the very inception of a project. Spending the time to research the market and identify the focus items and growers who are most likely to benefit from value chain activities is time wisely invested. VCCs are engaged in business development. Successful VCCs, like successful business owners, do the upfront research to make a business case for their work.

Define a Subset of Actors to Track The "best" approach to evaluating economic outcomes is to include all the farmers and all the products and all the buyers, collecting information exhaustively. The "doable" approach is to use a subset, taking care to select the subset of businesses that can be tracked to be representative of the type of businesses that are the focus of the work. This does not necessarily mean that all activity will focus on a subset of 8 known farmers and 4 known produce items; but having a set of farms and products to track closely can serve as indicators of the efficacy of the value chain work. In a sense you can use selected

farmers and products as samples of the larger set of farmers and products that the value chain work includes. If your focus is on mid-scale minority owned farms, your subset of farmers should be mid-scale in size and minority owned. Focus your energies on building trust with this group.

Partner with Buyers An alternative or companion to collecting farm-level data is to cultivate relationships with a specific buyer, for example a social enterprise food hub or private distributor. If these entities see your work as contributing to their own profitability—helping them “build a local program,” for example—they will likely be more willing to share at least the percentage change in their purchasing from local farms.

Build Trust with Focal Growers and Buyers The ability to collect economic data largely depends on the degree of trust between the VCC and chain businesses. Good faith offerings of assistance, such as VCC time to link a grower to desired resources including one-on-one business counseling, cost-share or small grant programs, and introductions to buyers, should come before or in tandem with requests for information. If you include a grower in a grant proposal, make it clear that funders require reporting on these metrics, and come to an agreement on how sharing of information can take place. A university research partner or extension specialist can sometimes act as a bridge between the value chain coordinator and the business, with this research partner collecting the data and aggregating it so that it cannot be traced back to individual farms.

Questions to Guide Selection of Economic Outcome Measures

- *Where are all the possible data collection points in the value chain?
- *Is there an aggregation partner? Will this partner (hub, distributor, grocery buyer) share information on purchasing?
- *What incentive does our project offer to partners to share information?
- *What measure can we realistically obtain? Total or percent changes in profit, sales, or product volume?
- *Can we partner a weaker quantitative measure, such as change in sales or volume, with an informative qualitative measure on self-perceived profitability?
- *What set of farms and products could we use as a “sample” and indicator of outcomes experienced by a larger group?

Alternatives to Using Sales and Profit as Measures of Success

Value chain development is market development accomplished by building mutually beneficial relationships across a group—a chain—of businesses. Because of the importance of relationship-building to the value chain approach, a VCC may think that developing the local and regional market is simply a matter of connecting the existing demand for local food to the existing supplies of local food through matchmaking and convening. As VCCs recognize the need for grower (and other food business) capacity-building, they engage in training and resource prospecting. These efforts might include workshops on how to create a food safety plan or package for sale to wholesale markets; or connections to resources such as state cost-share programs or infrastructure loans or grants. VCCs contribution of knowledge and resources has the ultimate goal of increasing food business profitability and viability. As we know, this can take months or years to achieve and develop into reportable economic measures. What can VCCs use as measures of progress in the meantime?

The most often used quantitative metrics for “success” of value chain work, when economic outcomes are not (yet) available, are the numbers of individuals attending trainings, and the dollar value of resources identified and captured by the VCC. In the parlance of evaluation and logic models, these are process or program indicators of success: you said you’d train growers in X-topic, and this is how many were trained. The ultimate outcome—sales, profits, etc.—is still unknown.

An alternative way of thinking about success in the near term is to consider how the strategic position of the target business—typically individual growers, grower cooperatives, or the growers associated with an aggregator such as a food hub—has changed based on value chain activities, and how this improves the business’ position for greater profitability and viability. The framework for thinking about strategic positioning in a value chain comes directly from studies of business management and can be readily applied to value chain work.

The Economics of Value Chain Work

The intermediate step in value chain coordination, what results from value chain activities such as convening, matchmaking, and technical assistance, is the *improved competitive position* for the focal businesses in the chain. As noted above, smaller-scale farmers and food manufacturers are typically the beneficiaries of value chain work.

The Economics of Value Chain Work



Even before the reporting of dollar values is possible, an effective reporting strategy for VCCs can be to report on how their work has contributed to improvements in the competitive position of the value chain and its members. One way to frame and report on this work is based on how this position has been improved through business *upgrading* or *downgrading*.

Upgrading and Downgrading

Upgrading and downgrading refer to a business doing either more or fewer activities that influence how, when, where, and under what conditions their products reach consumers.

Upgrading means doing MORE things: having a wider array of products for sale, differentiating your existing products to appeal to a different set of consumers, creating more sales channels to different types of buyers. Downgrading means doing FEWER things: trimming your product line, eliminating less profitable sales channels, hiring a distributor instead of delivering your own products. VCCs can support businesses in identifying the improvements—upgrading or downgrading—that improve their competitive position in the marketplace.

Thinking about value chain work in this way, and reporting on the work to show how it has enhanced the competitive position of growers, can complement and reframe the way in which VCCs report on their activities and associated outcomes. Even if you do not (yet) know the sales or profits related to a specific change in the business, evidence that market research was conducted, (which entails the research, matchmaking and resource prospecting activities of value chain coordination), and that a grower or other food producer took action can be reported as an economic outcome. Did the farm diversify its market channels? Did it add a new certification in response to market research? Did a small-scale food manufacture reduce its line of items to yield greater production efficiencies? These outcomes are easier to observe, and to learn from informal conversations with food producers, than are sales and profit. Gathering this information is

Examples of Supply Chain Upgrading



more “doable” in the sense of being less time-consuming *and* can preserve a VCC’s relationships with value chain members as they cultivate relational trust.

Balancing Relationships and Reporting

Efficient and effective reporting on the economic outcomes of value chain work requires a symbiotic combination of trusting relationships and successful development activities. Farm and other food businesses are more likely to work with and share economic outcomes with a VCC if they trust the VCC and have seen that the VCC’s work can improve the competitive position of their business.

Time is an underappreciated resource critical for value chain development. Time to do the upfront research to make a business case for focusing on specific businesses and specific products. Time to build trusting relationships so that farm and food businesses are willing to share information on their sales and profitability. The non-food-hub VCCs associated with the Food LINC initiative agreed that three years was a reasonable assumption to make on the time needed to develop a value chain that would yield reportable changes in sales, volume, or profit.

With the assumption that reliable quantitative economic data will not be available until years two or three of a project, define intermediate steps that improve the competitive position of the business during those years, and make “reliable reporting of economic outcomes” a project objective, with activities defined to achieve that objective. After having been in her position for two years, one of the Food LINC VCCs offered this advice to new Value Chain Coordinators: “Be realistic about your anticipated outcomes. Your goal in year one is not to get your transaction numbers as big as possible, it is to make your relationships as solid as possible.” Through a steady process of building knowledge and relationships and being realistic about what kinds of economic data will be available over the course of a project, VCCs and funders can plan more intentionally and with more success.