

## **Value Chain Coordination Quicksheet**

Evaluating Convening Events: Social Network Analysis and Rapid Stakeholder Surveys

Convening groups of stakeholders is an important facet of value chain coordination work. Meetings offer an opportunity to capture diverse stakeholder perspectives and surveys can be an effective way to understand relationship connectivity in the group. Below are two survey approaches that can be used to track VCC relationship-building efforts through convening events. Each approach includes explanations of data collection, examples of results, and pros and cons of each approach, to allow you to choose the best method for your organization's needs.

Convening events can bring together farmers, processors, wholesale buyers and consumers for education and networking opportunities.



## 1) Social Network Analysis

Social Network Analysis (SNA) is an emerging form of analysis in the food systems research and evaluation space. SNA surveys of participants at convening events yield social maps (sociograms), which provide a visualization of connection between attendees. Social network surveys can ask questions about different kinds of relationships including business ties

(tie = network terminology that means "connections"), information sharing ties, funding ties, and more. Network surveys are also useful to show changes in connectivity of the group over time. These surveys can track change from before and after a meeting by asking people to identify previous and new connections made at a single event. Or, surveys can be conducted at a later point in time (ex. 6 months after a convening event) to find out what kinds of connectivity persisted after the event. Below are the five basic steps to conducting social network analysis.

## **SNA PROCESS**

#### **Basic Steps**

- Identify the network boundary who is in, who is out?
- Identify key relations to explore how are individuals related?
- 3. Collect data surveys, interviews, online content, secondary data
- Map and Analyze quantitative, qualitative and visual dimensions using SNA software (UCINET, R, GEPHI, NODEXL)
- Interpret Results determine which tools and measures answer your question, present data to stakeholders

#### **SNA Survey Collection and Analysis**

SNA surveys for small groups may use what is known as the "roster model" in which you make a list of all attendees and ask each survey participant to indicate who they know from this list. This works best in smaller groups (under 40 approximately) and groups with well-defined boundaries. The more common approach for larger groups and groups with un-defined boundaries (i.e. a meet the farmers/buyers event) would use instead an open-ended format such as the "name generator model."

Example of a name generator survey template. This was used in a large event with over 150 attendees. Top two relationships to survey were chosen.

\*Note that participants were asked to state their top connections rather than all possible connections.

make at the conference that you plan to do business with in the future?	event, who did you do business with BEFORE today?
Please list top 6: Who might you sell to / buy from in the future (ex. John Jones, Sunnydale Farm)	Please list top 6: Who do you sell to / buy from currently
1	1
2	2
3	3
4	4
5	5
6	6
2a. Which NEW business resource contacts did you make at the conference?  Please list top 3:  New connections with Lenders, Extension, etc.	2b. Which business resources hav you worked with BEFORE today? Please list top 3: Former connections with: Lenders, Extension, et
1	1
0	0

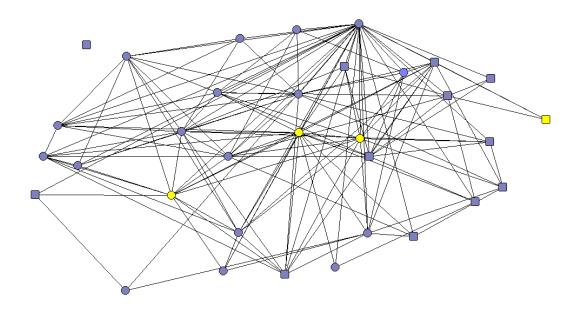
# Whole Network Results

\*Depending on the response rate of your survey, you may be

able to look at the whole network or just partial network data. It is more difficult to obtain whole network data, as it requires a majority of attendees to complete the survey. If the group is small or the response rate is over 80% of attendees, you can collect whole network data. Below are examples of data that can be reported from whole network surveys:

- Centrality (who is the most connected)
- Most between or bridging (who has the most connections to otherwise isolated actors)
- Most isolated (least amount of ties)
- Clusters and Cliques (Where are dense sub groups of connectivity)
- Changes in Density of Network (Percent connectivity of actual ties to all possible ties)

Below is an image (created with UCINET software) of whole network data in which the yellow are those with highest "betweenness" or "linking" to others in the network.



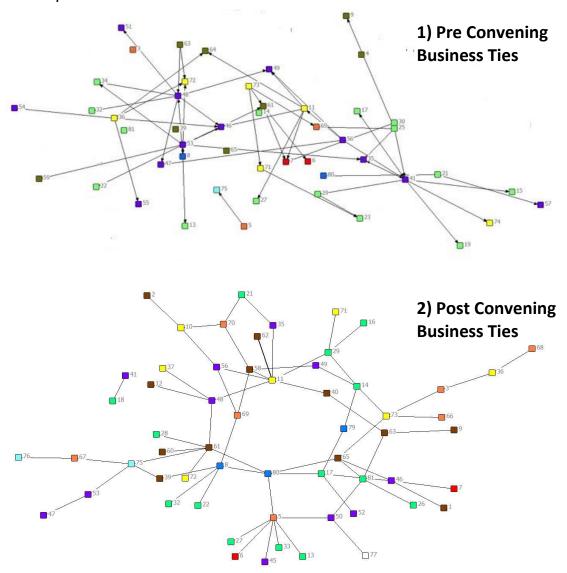
## **Partial Network Results (or Individual Network Data)**

Sometimes you may only be able to get a small group of people from an event to participate in a survey. Even with just a handful of responses you can still visualize connections and learn about useful patterns of development in the network.

### In partial networks, you can observe the following kinds of results:

- Number of former and new relationships (ties) formed
- Overall size of network
- Patterns of connectivity such as triads, dyads, clusters, etc.
- Ability to compare "before" and "after" networks in a visual manner

Below are examples of network maps made with partial network results. Both network images are from the same convening event but taken at two points in time.



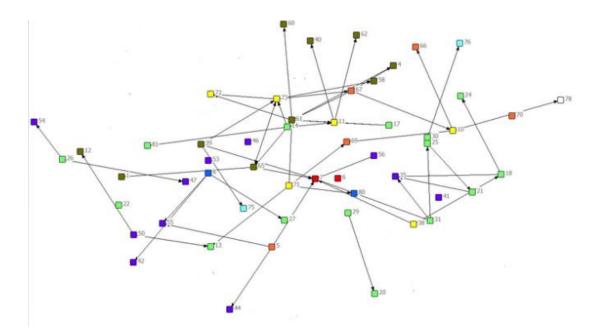
#### **Attribute Data**

If you collect attribute data such as: occupation, gender, industry, etc. you can analyze patterns of connectivity, for instance understanding if those with similar attributes are only connected to each other, etc.

Below is an example of a farmer/buyer event in which actors are color coded by role in the value chain, which allows for patterns of connectivity to be observed. Value chain coordination professionals can use these maps to make decisions about which actors need more connectivity, and which actors are working well together in partnership. Coordinators can partner and engage well-connected actors (who act as relationship bridges) to help share information and ideas with less connected actors.

Producer – Green
Processor – Orange
Distributor – Dark Blue
Restaurant/Retail – Cyan

Education/Research – Yellow Support /Advocacy – Purple Coordinator – Red Input Supply – Brown



#### **Pros and Cons of Network Surveys**

#### **Pros:**

Ability to create compelling visualizations of network connectivity Ability to visually map relationship change over time

#### Cons:

Data for SNA surveys can be difficult and time consuming to obtain, especially from a large group (over 40-50 people)
While open source software exists (see page 10), analyzing and mapping the data takes time. You may need to rely on an expert or consultant to analyze and create visualizations for your group.

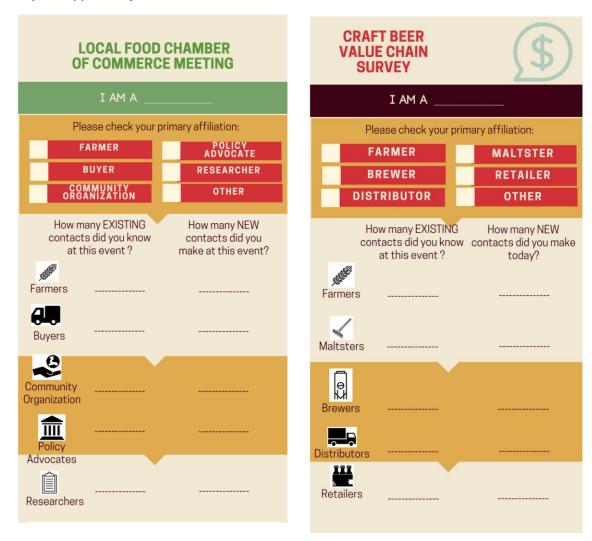
## 2) Rapid Stakeholder Surveys

In some cases, conducting a social network analysis may be too time or cost prohibitive, or not of interest for the convening event goals. However, it is still useful to capture connectivity and relationship building of these events through rapid surveys. More common metrics may rely on a simple count of attendees present at the event. However, this number says nothing about the patterns of connectivity that may be of interest at these events.

Rapid surveys are meant to be taken in 5 minutes or less, and do not require the survey taker to list names, as with the social network survey. This kind of survey captures patterns of connections among affiliations, not individuals. A meeting roster with affiliation may be useful for the survey taker, to help survey takers identify correct affiliation and with memory recall.

#### **Rapid Survey Collection and Analysis**

Below are two examples of template for rapid stakeholder surveys for various kinds of VCC convenings, such as stakeholder meetings or meet-the-buyers type conferences.



## **Data Results from Rapid Stakeholder Survey include:**

- Connection Trends
- Existing Connections within Group
- New Connections within Group
- Percentage of Connectivity
- Gaps in Connectivity
- Long Term Impact of Connections Formed or Fostered at Convening

#### **Example of How to Report Results:**

- **Connection Trends:** "On average, farmers made most contacts with other farmers, then buyers, then community groups"
- Existing Connections within Group: "Before attending this group, farmers had approximately 3 total preexisting connections to buyers in today's meeting
- New Connections within Group: "On average individual farmers made 15 total connections from today's meeting, buyers made 20, researchers made 15"
- **Percentage of connectivity:** "From the group, new connections were formed with 44% of total attendees"
- **Gaps in Connectivity:** Surveys showed very little direct connectivity between distributors and producers before the event
- Long Term Impact: Conduct a follow up in 6, 9, 12 months with a random sample (5 People) and ask which connections were most valuable.

#### **Pros and Cons of Rapid Stakeholder Surveys**

#### Pros:

- Provides high level descriptive statistics about connectivity trends
- May be used to track change from before and after periods of time
- Quick, easy to administer and analyze

#### Cons:

- Does not provide information about individual actors' connectivity, only anonymous patterns of connectivity
- Does not create a visualization of connections.

#### **Select References:**

For more information on conducting network analysis, you may consider the following resource:

Borgatti, S. P., Everett, M. G., & Johnson, J. C. (2013). *Analyzing social networks*. SAGE Publications Limited.

Giuffre, K. (2013). *Communities and networks: using social network analysis to rethink urban and community studies*. John Wiley & Sons.

Holley, June. *Network weaver handbook: A guide to transformational networks*. Network Weaver Publishing, 2012.

Wasserman, S., & Faust, K. (1994). *Social network* analysis: Methods and applications (Vol. 8). Cambridge university press

Select Network Analysis Tools:

UCINET Kumu Gephi Nodexl



