SHARING OXFAM’S EXPERIENCE OF USING TWO APPROACHES FOR NETWORK ASSESSMENT

Social Network Analysis and Qualitative Assessment Scorecard

Learning from Oxfam’s networks in the South Caucasus, Vietnam and Lebanon
1 INTRODUCTION

In this paper, we share Oxfam’s experience of using and adapting two approaches to network assessment: Social Network Analysis (SNA) and Qualitative Assessment Scorecard (QAS). Network assessments are useful throughout the lifetime of a network for different purposes: at network formation stage, the design of influencing and advocacy interventions and for the monitoring and evaluation of a network’s contribution to change.

Drawing on the experiences of teams in the South Caucasus, Vietnam and Lebanon, this step-by-step guide has been produced to answer frequently asked questions (FAQs) about how and when to use SNA and QAS. It contains links to useful resources that are available free and online. The hope is that colleagues and practitioners creating or supporting ‘networks for change’ will recognize their good practice and feel more confident and inspired to find out more about how these approaches could be adapted to suit their network’s needs and objectives.

WHO IS THIS DOCUMENT FOR?

Monitoring, evaluation and learning (MEL) and programme colleagues creating or supporting ‘networks for change’.

WHAT DOES IT CONTAIN?

- A step-by-step guide and FAQs about how and when to use SNA and QAS.
- Links to useful resources available free and online.
2 SOCIAL NETWORK ANALYSIS (SNA)

WHAT IS SNA?

SNA is an analytical approach that helps to visualize and analyse actors in a system to better understand the dynamic nature of the relationships within a network. SNA can help inform understanding of whether a network is fragmented or cohesive, whether its individual members are central, peripheral or play a broker or bridging role to others, and along what lines members ‘cluster’ within the network.

SNA involves a questionnaire-based survey to collect data, which when run through specialized software can produce visual maps of the network, which can then be analysed. SNA offers a big picture of the network, mapping not only who the actors are (already achieved by stakeholder analysis) but how the actors do or do not relate to each other, and the nature or purpose of these relationships, be they for information, funding, influence, services or patronage.

WHAT IT DOES

SNA will help you to find out:

1. The number of connections in the network – the density of the network.
2. The role or function of actors in the network – understanding which organizations have a central role, which play a connector role and which are more peripheral.
3. SNA can map the distance between actors in the network, for example, revealing the number of connections between one organization and another (called the ‘closeness centrality’).

HOW TO DO SNA

Oxfam in Georgia and Armenia used Social Network Analysis (SNA) to strengthen two national food security civil society networks engaging with governments on policy change. This was in a context of a planned Oxfam withdrawal from the region. Drawing lessons from this experience, colleagues have put together this handy four-step guide to SNA:

1. Development of the methodology.
2. Field work.
3. Data cleaning, processing and preparation for the analysis.
4. Analysis of the results, data visualization and development of recommendations.

Approximate timings are given as per the SNA experience in the South Caucasus Food Security Programme.
### Step 1: Development of the methodology (12 weeks)

#### Preparatory work and learning from the SNA experience of others (4 weeks)
Review network activities and documents and refer to published examples and case studies of using SNA.

#### Survey design (4 weeks)
To design the survey, you need to determine:

- Who you want to answer the survey. All members? Do you need to exclude anyone, e.g. state actors, cooperatives, media agencies, private sector?
- What is your sampling strategy? The snowball principle can be used, whereby the first stage members are asked who they worked with within a specified timeframe and these actors, if not already consulted, then make up the second sample. This is then repeated as required.
- What you want to ask them? What are the critical issues that you need to explore through the SNA? This might be finding out more about how members are sharing information or resources, or how they are working together on advocacy.
- Establish a clear timeframe. How far back should you go? Your questions will need to stipulate this e.g. ‘Please name all the organizations and independent consultants you have worked with on food security issues over the last 12 months.’

#### Preparation of the survey tool (4 weeks)
- What language does the survey need to be in?
- What tool or platform will you use to deliver the survey and collect responses? It can be paper-based or digital. Online survey software (e.g. Survey Monkey) can be a useful tool.

### Step 2: Field work (6 to 8 weeks)

#### Some key things to remember:
- Obtaining informed consent can take time and be complicated.
- It can take a number of communication exchanges with respondents and heads of organizations to clarify the purpose and objectives of the research.
- Consider creating a new email address specifically for the SNA work and use for all communication with SNA respondents.
- Consider piloting the questionnaire with a small number of organizations.
- Response rates tend to be quite low.

### Step 3: Data cleaning, processing and preparation for the analysis (4 weeks)

Data processing is one of the most time-intensive steps in SNA. Software such as MS Excel, SPSS, STATA, NodeXL, NetMiner or Gephi can be used for data processing. Specialist expertise, such as a data analyst or statistician, is vital at this stage, to help set up the data processing framework. Data processing encompasses the following stages:

- **Coding** – Coding of the open question values (organizations, activities, work field, etc.) is required for the purposes of easier and more accurate data cleaning and statistical analysis. Assigning a unique code value to each variable is necessary especially if the SNA is to be repeated at a later date (baseline, mid-term and final evaluations) in order to track the variable across time. Without the appropriate coding, comparative analysis is quasi-impossible.
- **Data cleaning** – This is necessary in order to find and correct any mistakes made in the interview/data entry process.
- **Data conversion to a format supported by the analysis** – Information gathered from each respondent in the interview process is frequently displayed as a single line in the database. This is not compatible with network analysis and the services of a data analyst are required to convert the data into a format compatible for analysis.
Step 4: Analysis of the results, data visualization and development of recommendations (4 weeks)

Data analysis can be done using SNA software such as NetMiner, NodeXL or Gephi. Different techniques used for analysis include structural analysis (looking at the structure of the network including density, bridges and clustering) and power and influence (degree centrality, closeness centrality and betweenness centrality). These are explored further in the Network Metrics section below.

Practical recommendations for beginner researchers:

When preparing maps, it is recommended that researchers focus on the main findings. All maps are required to answer the following question: What does the image depict? The visual representation of the findings communicates the key data much more easily than tables and words, but the real benefits come from making time for collective analysis and interrogation of the maps.

Thanks to Lasha Bokuchava, Head of Data Analysis and Statistics Department at ACT (Analysis and Consulting Group) for input into the steps of conducting SNA. Email: lasha.bokuchava@gmail.com. Web: https://act-global.com/about/

Useful links

• Social Network Analysis Handbook (International Rescue Committee)
• ‘What makes networks tick?’ Policy and Practice (Oxfam)

WHEN TO USE SNA

SNA has greatest value when done at the network formation stage. It provides the opportunity to build a more optimal network (meaning better aligned to the network’s purpose) and makes the most of opportunities for strategic alliances. It can also inform the design of influencing and advocacy plans.

SNA at the network design stage can also help with setting a baseline and providing a framework for monitoring and evaluating change in the network, particularly useful in terms of identifying network monitoring indicators.

However, some caution needs to be exercised if using SNA at other stages in the network’s timeline. How representative the SNA findings are is questionable, given the lack of clarity about the proportion of network members who have participated in the survey. And, given that response rates are typically low (around 35–40 percent), it is hard to draw comparisons of changes over time given that consecutive SNA studies may include different sets of respondents.

Another inhibitor is the need for neutrality and confidentiality for participants to express their opinions freely. In a context where the space for civil society is highly restricted, organizations will be less willing to disclose their informal connections or interactions. This is a genuine limitation on the quality and reliability of SNA as a process, and in these contexts SNA may not merit the investment.

In rapidly changing contexts, SNA runs the risk of having too short a shelf life to add value, as information quickly becomes outdated.
Although the tool cannot replace stakeholder mapping, power and gender analysis and theory of change, in the right context SNA adds texture and depth to analysis and measurement of a network. For example, in the South Caucasus, the tool included questions to enable a gendered analysis of the network, although these were limited to keep the survey a manageable length. As a result, the study provided important insights into the centrality within the networks of organizations with a gender justice focus. With further adaptation, SNA could also help to identify actors or groups who may be excluded or marginalized due to their gender or status.

**Network metrics**

Below are two different types of network metrics with their definitions:

- **Type 1:** Metrics related to individual members.
- **Type 2:** Metrics related to the network structure.

SNA metrics need to be interpreted in light of the intentions of the actors involved. With reference to Table 1 below this means network attributes are not by definition good or bad.

**Table 1: Metrics for network members and structure**

<table>
<thead>
<tr>
<th>Metrics for network members</th>
<th>Members’ positions within the network</th>
<th>Members’ roles within the network</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Degree centrality: the number of links a network member has with other members:</td>
<td><strong>Influential and prominent member:</strong> the member with the highest number of strategic links.</td>
</tr>
<tr>
<td></td>
<td>• In-degree centrality (number of links in to a member).</td>
<td><strong>Brokerage (liaison, consultant, coordinator, representative and gatekeeper):</strong> this can be identified by the betweenness centrality metric.</td>
</tr>
<tr>
<td></td>
<td>• Out-degree centrality (number of links out from an actor).</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Betweenness centrality: a member who is situated between two groups, and is a necessary route between those groups. It is not related to degree centrality.</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Peripheral actor:</strong> member with very few links to the rest of the network.</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Metrics for network structure</th>
<th></th>
</tr>
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<tbody>
<tr>
<td><strong>Density:</strong> This is a measure of how interconnected a network is. A network where all the members are connected to all the other members is said to have a density of 1.</td>
<td></td>
</tr>
<tr>
<td><strong>Inclusiveness:</strong> 100% inclusiveness if all stakeholders have at least 1 tie to network members; no isolated network members.</td>
<td></td>
</tr>
<tr>
<td><strong>Clusters:</strong> A cluster is a group of actors with many interconnections between each other, but few with others.</td>
<td></td>
</tr>
<tr>
<td><strong>Centralization:</strong> All or most of the connections are to one or few members.</td>
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</tbody>
</table>
Table 2 below shows one way for clustering the network metrics based on the network’s stage of maturity. It provides the status of each metric based on the maturation stage of the network itself. The table shows how metrics can be used as indicators with specific targets depending on the purpose of the network. It was adapted from the original source.

Table 2: Indicators for maturation stage of the network

<table>
<thead>
<tr>
<th>Network Alliance metrics</th>
<th>Alliance Development Stage</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Connecting</td>
</tr>
<tr>
<td><strong>Composition (Size and diversity)</strong></td>
<td></td>
</tr>
<tr>
<td>Number of members</td>
<td>Few</td>
</tr>
<tr>
<td>Number of social sectors represented</td>
<td>Few</td>
</tr>
<tr>
<td><strong>Connectedness</strong></td>
<td></td>
</tr>
<tr>
<td>Inclusiveness</td>
<td>Low</td>
</tr>
<tr>
<td>Average Reach</td>
<td>High</td>
</tr>
<tr>
<td>Reciprocity</td>
<td>Low</td>
</tr>
<tr>
<td><strong>Communities</strong></td>
<td></td>
</tr>
<tr>
<td># of cluster</td>
<td>Many</td>
</tr>
<tr>
<td><strong>Centralization</strong></td>
<td></td>
</tr>
<tr>
<td>Network Centralization</td>
<td>High</td>
</tr>
<tr>
<td>Alliance member centrality</td>
<td>Concentrated in few members</td>
</tr>
<tr>
<td><strong>Brokerage</strong></td>
<td></td>
</tr>
<tr>
<td>Brokerage</td>
<td>Many roles concentrated in few members</td>
</tr>
<tr>
<td><strong>Sustainability</strong></td>
<td></td>
</tr>
<tr>
<td>Potential for fragmentation</td>
<td>High</td>
</tr>
<tr>
<td><strong>Building the larger social movement</strong></td>
<td></td>
</tr>
<tr>
<td>Interaction with other actors</td>
<td>None or few</td>
</tr>
<tr>
<td>Bridges to other actors</td>
<td>Few members as main bridges</td>
</tr>
<tr>
<td>Communities (clusters)</td>
<td>Few</td>
</tr>
</tbody>
</table>
2 QUALITATIVE ASSESSMENT SCORECARD

QAS CASE STUDY: COALITION SUPPORT PROGRAMME IN VIETNAM

Oxfam’s Coalition Support Programme in Vietnam, funded by DFID from 2012–15, used the Qualitative Assessment Scorecard (QAS) co-developed by Oxfam and Oxford Policy Management (OPM) to help networks and coalitions identify their contribution to internal and external change processes.

The QAS has 10 indicators, each with three guiding questions. Network participants meet internally (usually a core group of three to six members) to discuss the indicators and score themselves from 1 (not yet) to 4 (very strongly) for each of the guiding questions. A typical guiding question is ‘Does the coalition demonstrate effective internal decision making processes?’

Based on evidence (such as activities conducted, media reports or policy changes achieved) the group describes and discusses changes that have happened in relation to each indicator since the last reporting period (usually six-monthly), and assesses their individual contributions to this change. The draft results are then reviewed and critically challenged by Oxfam programme staff and advisory panel members.

The advantage of using QAS is that it involves network participants directly in gathering the evidence and assessment of their own contributions to change. It also enables changes in network capacity and effectiveness to be tracked over time. QAS does not require statistical skills, so it can be conducted by network members themselves. The scorecard is less useful for comparing results across multiple networks, since scoring retains a measure of subjectivity.

Figure 1: Excerpt from Vietnam QAS
Six Vietnamese coalitions used the QAS during the first phase of the Coalition Support programme from 2012–16. In 2017, the QAS methodology was extended to three new coalitions working on budget and tax transparency, labour rights and water governance.

Coalition members often find QAS hard to use the first time, since there are many questions requiring intense discussion, and it is different to more familiar output reporting formats. However, once they have used the scorecard a few times, coalitions have found the QAS to be a usable, useful and cost effective means of tracking their own progress.

Although the Vietnam team felt gender was not sufficiently addressed in the QAS they reflected that it does have the potential to support MEL around critical gender outcomes. An earlier version of the QAS tool included separate questions, but these were subsequently integrated into other questions to reduce the length of the scorecard questionnaire. As a result, gender concerns were addressed – to some extent – within indicators on ‘coalition inclusiveness’ and ‘policy making procedures and public voice’.

As with any MEL approach, it is important to provide in-depth training at the outset, and coaching and accompaniment during the first few applications until partners are confident to carry out assessments on their own. Even then, Oxfam has an important role to play to ‘challenge’ the self-assessments, asking questions and sometimes offering alternative perspectives to those of coalition members.

Thanks to Andrew Wells-Dang, Senior Governance Advisor (Vietnam) for his contribution to this section. For more information on their tool, please contact Andrew at Andrew.Wells.Dang@oxfam.org

QAS CASE STUDY: LEBANON – RIGHT TO A FUTURE FOR PEOPLE AFFECTED BY THE SYRIAN DISPLACEMENT CRISIS

In the form of FAQs, below we share Oxfam Lebanon’s experience of adapting the QAS tool to the Lebanese context and in line with the objectives of the ‘Right to a Future for People Affected by the Syrian Displacement Crisis’ project and its related network of 14 Lebanese, Syrian and Palestinian civil society organizations (CSOs) working together on protection and human rights in the country.

What stage in its maturity was the Lebanese network?

The network created in December 2016 is at early formation stage.

What was it about QAS as an approach that made it the approach of choice?

QAS’s focus on assessing the technical capacities of the CSOs, the level of their engagement in policy discussions and their contribution to policy change – all of which are priorities for the success of the project.
What did the members of the network want to find out by using the QAS?

QAS was used to collect baseline information about the capacities and level of engagement of CSO members in policy discussions, to feed into the design of capacity development and training activities for CSO members to better equip them to engage in successful policy dialogue.

How was the QAS used?

The survey was used as a baseline, and there are plans to administer the same survey at a midline and end line point to contribute to the overall MEL of the project and the network. Questions will be added (within reason!) to gauge and track improvements over time in CSO members’ capacities and level of engagement in intra-network discussions. At the end line point the QAS will include a question related to ‘What is needed to sustain the network?’.

How did the network adapt the QAS to suit its needs?

This is a great example of learning by doing, or adapting by trial and error. Initially, a 90-question-long survey was uploaded to Survey Monkey and sent out to CSO members of the network. The questions were tailor made, and sought to gather quantitative (scoring) and qualitative (open-ended questions) information relating to CSO technical capacities, level of engagement in policy discussions and contribution to policy change (in line with project indicators).

But response rates were very low (14 percent), plus the quality of the data was poor. When asked why, network members enumerated the length of the survey, lack of previous policy engagement experience and the incompatibility of Survey Monkey with ‘lengthy’ qualitative feedback as reasons for not responding.

Going back to the drawing board, the Planning, Monitoring, Evaluation and Accountability Coordinator and Programme Manager made a number of changes:

- They significantly shortened the survey, reducing it from 90 down to 10 questions, focusing solely on gathering information about CSO advocacy and campaigning capacities, with two additional questions around resources needed to enhance these skills, and CSO perceptions of the added value of network membership in relation to advocacy and campaigning capacities.

- They decided on paper rather than digital. Hard copies of the new survey were printed and distributed to the CSO members during a network meeting. Members manually completed the scorecard and the results were subsequently entered and analysed.

With these changes, the response rate increased to 87 percent and the quality of the collected data improved.

Thanks to Dalia Mikdashi, Project Manager (Oxfam in Lebanon) for her responses on the development of their QAS. For more information on their tool, please contact Dalia at dalia.mikdashi@oxfam.it
NOTES

1 The Georgian Alliance for Agriculture and Rural Development (GAARD) and the Agriculture Alliance of Armenia (AA).


3 Outcome 1 (coalition quality) is composed of indicators on technical capacity, governance capacity, inclusiveness, strategic ability, and sustainability. The indicators for Outcome 2 (policy effectiveness) are quality of public debate, level of public commitment by policy makers, quality of policy making procedures, substance and quality of policy content, and quality of policy in practice.
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For further information on the issues raised in this publication please email Jacky Repila: jrepila1@oxfam.org.uk

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Oxfam GB, Oxfam House, John Smith Drive, Cowley, Oxford, OX4 2JY, UK.

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