Net-Map Case Study Series

Net-Map is an interview-based mapping tool that helps people understand, visualize, analyze, discuss, and improve situations in which many different actors influence outcomes. The tool was developed by Eva Schiffer at the International Food Policy Research Institute (IFPRI). This case study series collects experiences with the tool from around the world and is intended to explore different applications and adaptations of the tool, inspire future users and initiate discussion and methodological development. Users who would like to contribute their own case study and share their lessons learned, are encouraged to contact Eva Schiffer at IFPRI-NetMap@cgiar.org.

Case study 1: Organizational learning in multi-stakeholder water governance

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Background of the Case Study:

The case study is drawn from the Challenge Program Project 40: "Integrating Governance and Modeling"[1]. In this case the tool was used for a combined research and organizational learning activity with a new multi-stakeholder water governance organization the *White Volta Basin Board* in northern Ghana. The organization is a river basin board on the sub-national level consisting of 17 institutional members representing district assemblies, regional level line ministries, traditional authorities, NGOs and the research sector. The basin board has low formal decision-making and enforcement capacity and thus needs to strategically use its governance networks to achieve its developmental and environmental goals. In a process of three interventions spread over one year, the members of the new board clarified their own view of the governance network in which they are going to operate, discussed differing views in small groups, agreed on a common network for the whole group and developed strategic ideas based on the strengths and weaknesses of their network situation.

Adjustments of tool for specific case:

The individual interviews were conducted with equipment as provided in the Net-Map toolbox. However, for the facilitation of bigger groups it proved useful to increase the size of visualization tools to make sure that everyone can benefit from the visualization to the same extent. During the network mapping with a bigger group it was more feasible to transform the flat three dimensional layout into a two dimensional one, which could be stuck to the wall.
Equipment added for bigger group: very large sheet of paper to stick to a wall, cardboard for actor cards (print-out of actor cards in big print, actor names from

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[1] Challenge Program for Water and Food of the Consultative Group on International Agricultural Research

previous individual interviews), cut-out cardboard rectangles to represent the stackable discs and cut-out actor figurines.

How tool was applied:

While the general steps for individual interviews are described in the manual, the focus here is on the way this tool was used as part of a bigger process of research, learning and group development.

Preparation:
- Question defined: "Who will influence whether and how the basin board will achieve its goals?"
- Links defined: Lines of command, flow of funds, giving of advice, flow of information
- Target group and interview partners defined: all members of the *White Volta Basin Board*
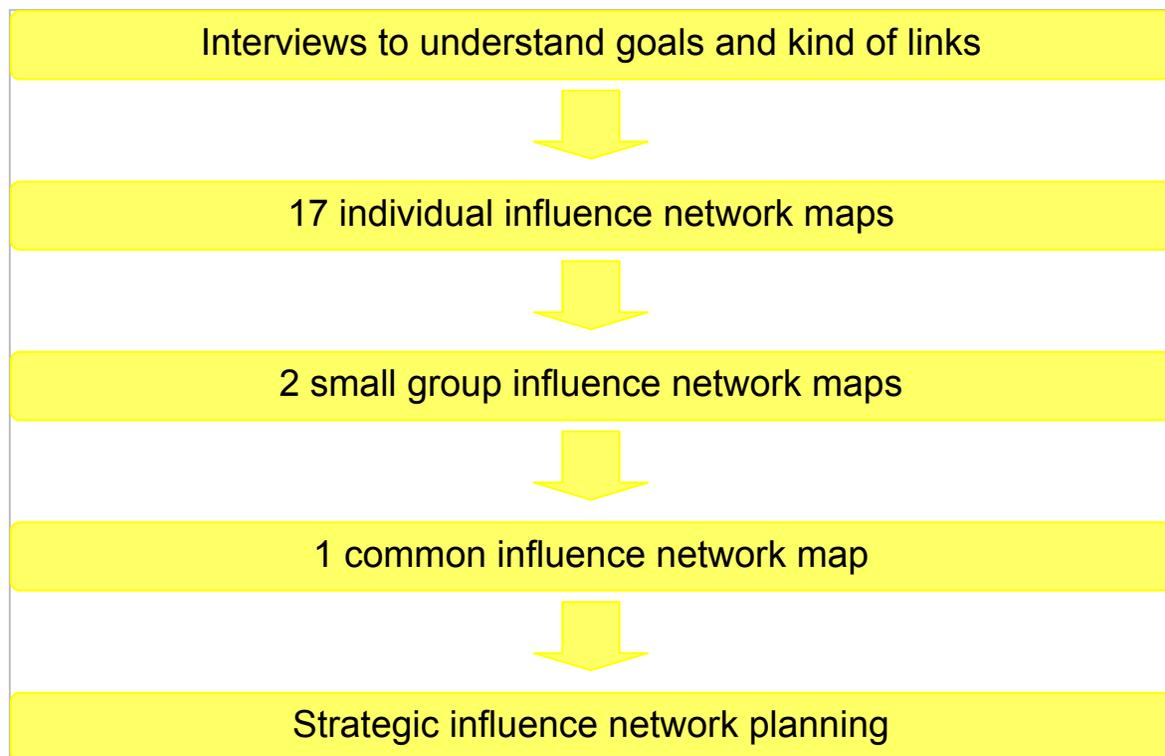
Steps taken during the process:

Interviews to understand goals and kind of links
↓
17 individual influence network maps
↓
2 small group influence network maps
↓
1 common influence network map
↓
Strategic influence network planning

Figure 1: Net-Map learning process with White Volta Basin Board

1. Qualitative interviews with all board members about their goals and expectations for the basin board. Feedback to board members through write-up and discussion.
2. First round of Net-Maps: Individual interviews, drawing Net-Maps with all board members concerning:
       "Who will influence the goal achievement of the board?"

"How are they linked (command, funds, advice, information)?"
"How influential are they (influence towers)?"
"What are their goals (environmental, developmental or both)?"

3. Second round of Net-Maps: Feedback on results from first round. Small group activity with groups of 6-7 board members and higher level policy makers in same governance field. Each group developed a network together (questions as in first round, actors limited to those mentioned in the previous step, small groups choose from prepared actor card print-outs).

4. Third round of Net-Maps: Feedback on results from second round. Whole basin board group develops a common network together (questions as in first round, actors limited to those mentioned in the previous step, group chooses from prepared actor card print-outs).

Data collected, learning processes and results

The exercise described was done as both research and organizational development. So the results are significant both in terms of data collected and in terms of learning processes instilled in the group. One factor that distinguishes this tool from many other pure data collection tools is that a lot of the learning process happens *during* data collection and not through documents produced after data analysis. This makes using Net-Map very rewarding both for interviewer and interviewee. Furthermore it addresses the conflicting time frames of researchers and policy makers, where researchers often take more time to analyze collected data than policy makers can afford to wait before taking the related decision.

Photo 1: One of 17 Individual Net-Maps of Basin Board members

The data collected consist of 17 individual networks, 3 small group networks and one collaboratively developed common network of the whole basin board. Added to this quantitative data are protocols of individual interviews and group discussions that document the processes of developing ideas, disagreeing and finding consensus and learning throughout the mapping exercises. Data analysis focuses on differences between individual maps, the development of a cognitive social structure (stacking of 17 individual network maps to develop a common picture), analysis of influence values (according to influence towers) and centrality measures (according to position in networks). The changes from the first maps to the final maps are also analyzed to understand the learning processes that individuals and groups engage in through using the tool.
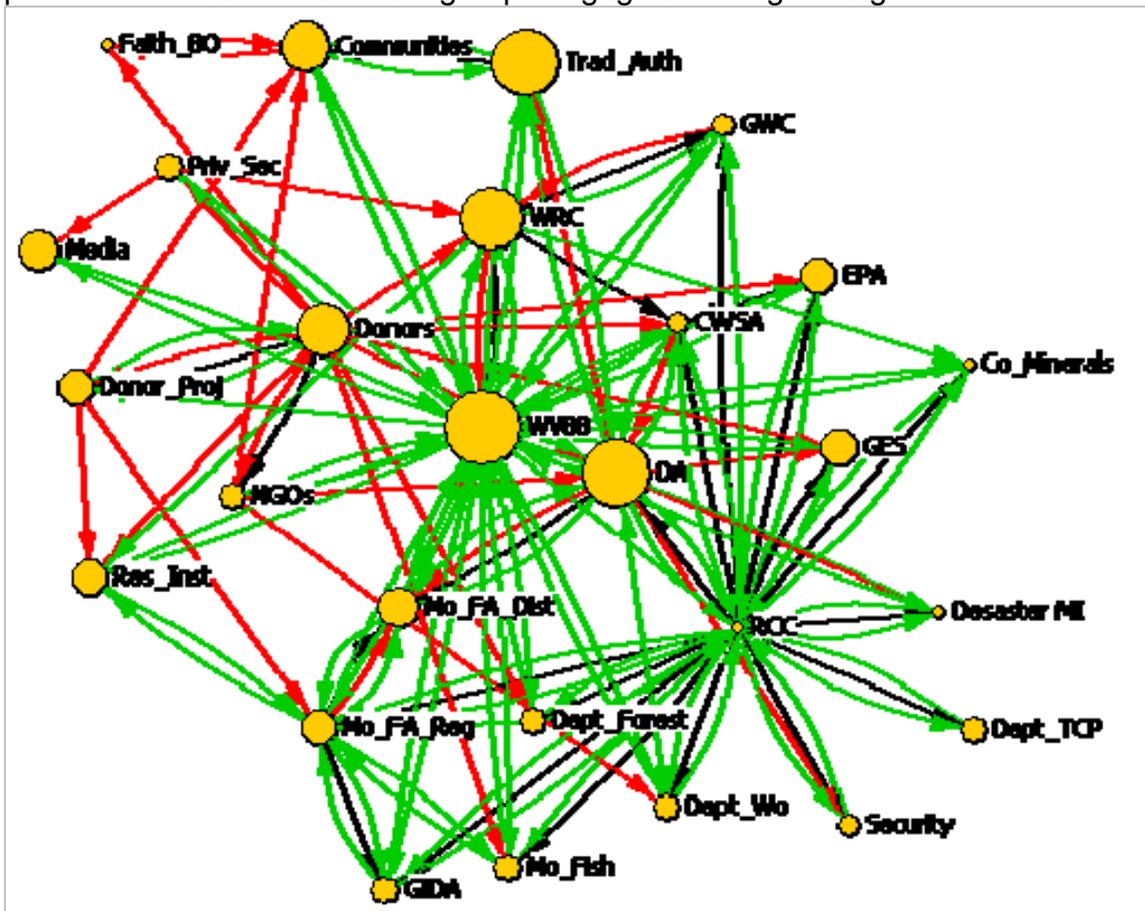
Figure 2: Common Net-Map of Basin Board through collaborative group process (July 2007, drawn with VisuaLyzer)
links: black: command
          red: funds/money
          green: advice
size of dots: Height of influence tower

The learning process for the board members started in the individual interviews by structuring and making their implicit network knowledge explicit. Every member had a certain understanding of who is involved in the governance setting, how they are linked, what their goals and influence are. However, in day-

to-day business, they tended not to reflect upon the setting as a whole. Most interviewees commented on the increased understanding they gathered through visualizing their complex views of the governance field.

The work with the basin board showed that many board members assumed that everyone would share their view of the network ("This is how it is! Everybody will see it this way!"). Thus the first learning step for the members of the organization was to understand that views of the network can differ. In a facilitated group process board members explored how they could benefit from the different views represented in their organization. They understood the reasons for differences, and integrated their views into a common network map as shown in the table below.
This case study is documented while the process is still ongoing, thus the future will bring more insights in the effects that net-map has on governance capacities of multi-stakeholder bodies.

Reason for different individual Net-Maps	How difference was dealt with in group discussion
Different **positions** of the interviewee in the whole network, affiliation to different organisations in terms of level, goal and kind of organisation	Members know "their" part of the network best. By explaining it to other board members, participants learn about parts of the network that they are not familiar with and develop a more balanced common network
Different level of **experience** and insight of individuals	In the group discussion all members were active; however, some assumed the role of experienced network experts that gave detailed descriptions of their past and possible future interaction with network partners, which increased the concrete network knowledge of their less experienced colleagues.
Different **views** concerning what makes someone influential	Engaged discussion of board members trying to convince their colleagues of their views. The result was a more balanced common map where every important function in the network (funding, policy making, initiating activities, spearheading implementation and incorporating change) is represented. Board members chose to put one actor for each role respectively on a high influence tower.
Blind spots, some actors that were only mentioned by one interviewee	Some actors were only mentioned once, because they were un-important and were dropped by the group. But in some cases actors only mentioned once were included in the common map after one board member made a convincing case why this actor should be included and thus erased his/her colleagues'

blind spot.

Table 1: Reasons for differences between individual network maps of the Basin Board

Lesson learned and recommendations

- To start with, it is important to define the questions and concepts (e.g. names of links) used very clearly together with the participants, so as to avoid misunderstandings or drawing a map that is too general to be of any concrete use.
- In group discussions encourage participants to explain the reasons for differing views to help them explore the different sources of influence in their network.
- Encourage group members to share concrete examples of past interactions with members of the network and develop strategic ideas for future interactions.
- As a facilitator, guide the process so as to avoid that a small number of more vocal group members dominates the discussion.
- When developing a common network, do not solely focus on the Net-Map as outcome. Allow for as much discussion as the group needs so that participants can explore together, learn from each other and build a solid foundation to agree on a common view.
- Familiarize yourself at least with basic concepts of social network analysis and explain to participants how the centralities of actors, roles like gate-keeping, network properties like clustering, centralization and structural holes are reflected in their networks and can impact on their ability to achieve their goals (a good basic introduction is Hanneman, 2001).
- Repeated Net-Map activities and feedback allow participants to improve their network thinking and incorporate the lessons learnt in their daily practice. This can help them to keep the overview in a complex governance situation and be strategic in the development and maintenance of formal and informal links to other actors.
- Be flexible! This tool provides a very basic structure. It is most powerful if you adjust and adapt it to the needs of the participants and the concrete situation on the ground.