

Antonia Bogadi

How can knowledge matter?

Understanding the discrepancies between division of knowledge and influence in urban governance networks

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concern

Where are the discrepancies between the actors' influence and the knowledge in governance networks?
Where is both knowledge and influence accumulated?



percieved influence, level of knowledge utilisation and actor's traits

Percieved actor's influence

Actor level of knowledge utilisation

Exposure to informal communication

Exposure to information exchange

Formal authority

Actor's percieved competence

Actor's ability to help

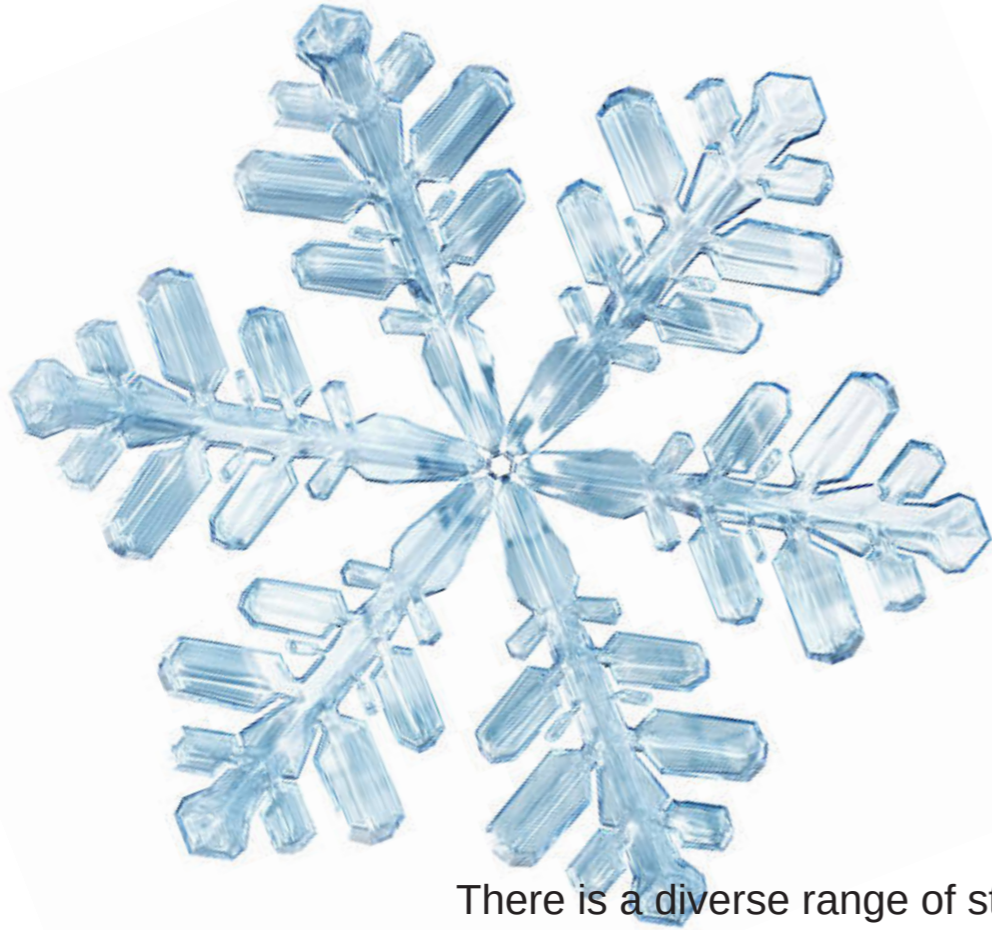
Actor's avaiiability

case studies

1. It is the environmental project that has implemented the research (new knowledge) about urban ecosystem services into urban green infrastructure project, and the flow of that new knowledge can be tracked from the execution of the project to the research.
2. The environmental projects have been executed within the urban governance networks. Based on the three characteristics of networks, these projects should match the criteria that (1) many actors are involved and they practice frequent contact between them, (2) project is implemented and is stable over time, and (3) that they are dealing with the complex issues, so decision-making process is complex.
3. When reconstructing their actions, the risk that respondents forget or rationalize their behavior is apparent. This possible weakness with the interview study is minimised by choosing projects where no more than two years have passed since the knowledge utilisation process started.



sampling



There is a diverse range of stakeholders involved in the ES implementation within the urban governance network. The governance network includes actors working at different ecological scales and local and national levels of decision-making. I focus on actors engaged within:

1. Civil society organizations (nonprofits, informal community groups, grass roots community organisations, local activists, homeowners, concerned citizens) that serve any of the following functions: conserving, managing, monitoring, advocating for, or educating their friends, neighbors, or public officials about the local environment,
2. Government departments and agencies, local authorities,
3. Universities, research institutions,
4. Private business, social enterprises, real estate developers.

Snowball sampling method is appropriate when networks of individuals are the focus of attention. Individuals are selected because they occupy a position fitting to the investigation, and this primary sample is then used to suggest further relevant participants to expand the research.

data gathering



Data gathering and processing

Structured interviews, with actors previously determined by snowballing, are conducted to reveal the specific social relations/indicators for the actors' characteristics. That data is then translated into network diagrams, where actors represent the nodes, and links are exchange of a certain type of information or resource. The links reveal degree centrality (number of times a person is named as a specific social contact by other people) based just on high frequency of interactions. Such simple social networks are a way to assess the correlation between actor's structural position in various network types and their perceived level of influence on knowledge utilisation. Motivation, type of activities, and associated institutions are directly correlated to the level of perceived influence.

actors



1. Civil society organisations



Nonprofits

subsection:



Informal community groups

subsection:



Grass roots community organisations

subsection:



Local activists

subsection:



Homeowners

subsection:



Concerned citizens

subsection:



2. Government departments and agencies



National level

subsection:



City authorities

subsection:



Neighbourhood level

subsection:



3. Research institutions



Universities

subsection:



Research Institutions

subsection:



4. Private business institutions



Private business

subsection:



Social enterprises

subsection:



Real estate developers

subsection:

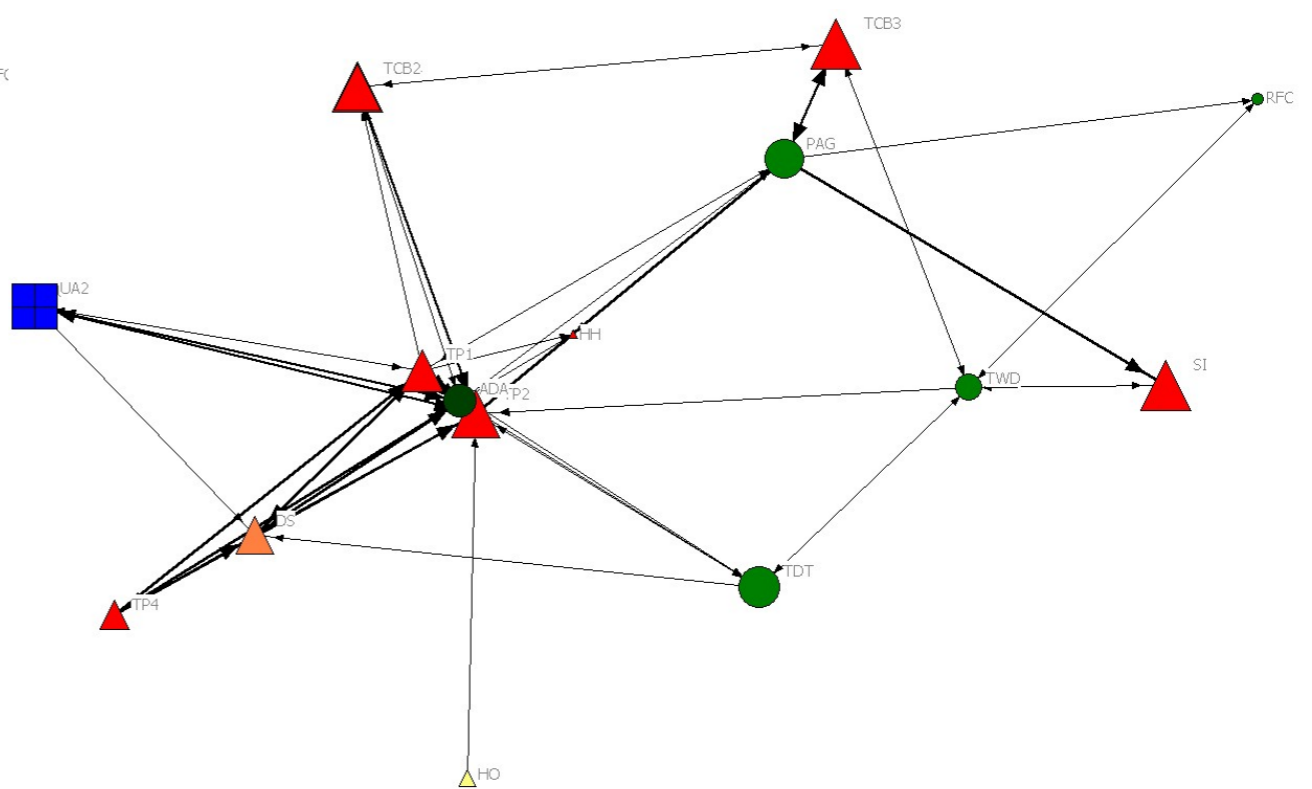
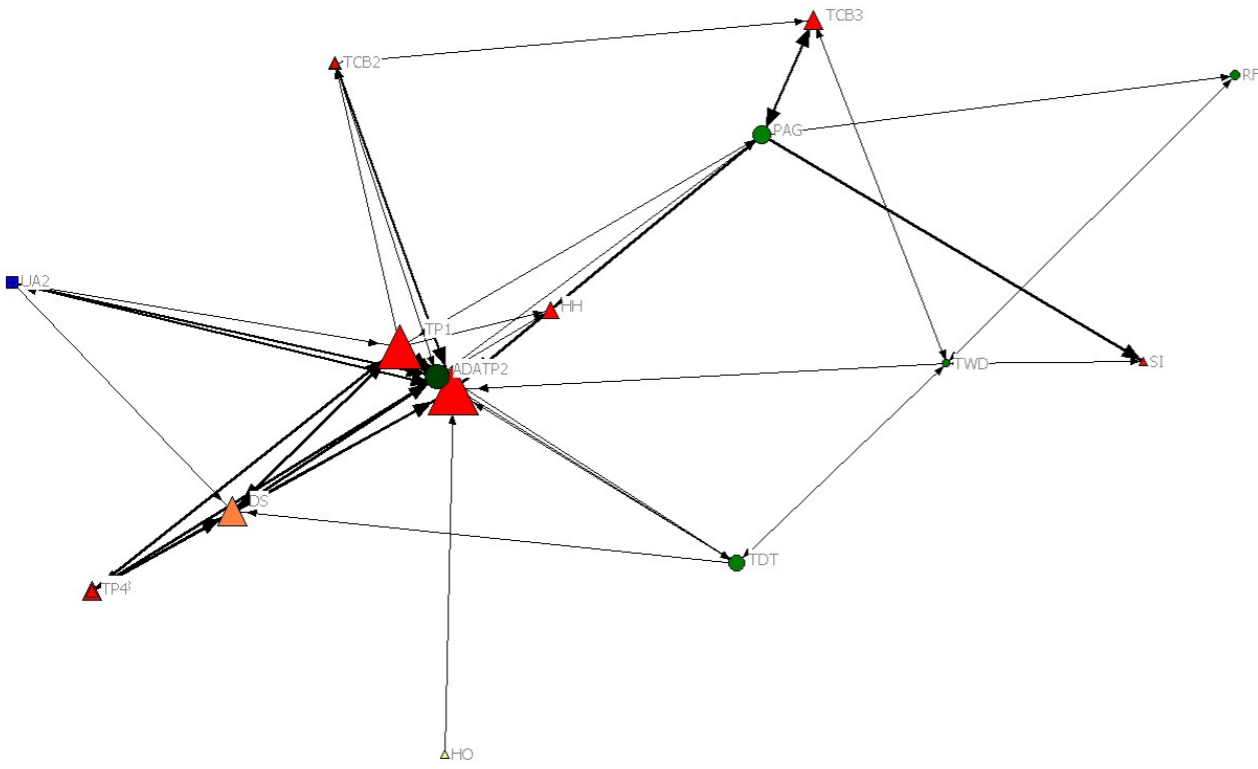


5. Other

Whom do you talk to about work?

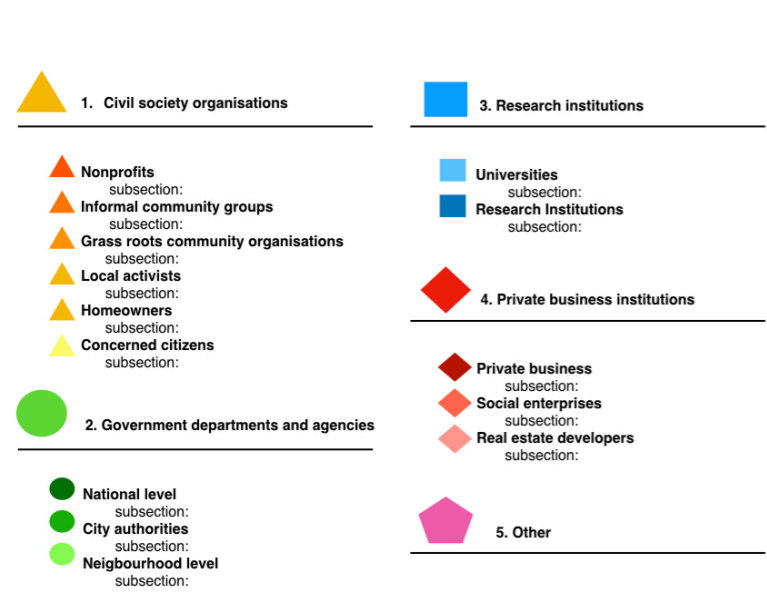
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Colour of a node: Affiliation **Links: Formal communication**



Size of a node: Percieved influence

Size of a node: Level of knowledge utilisation



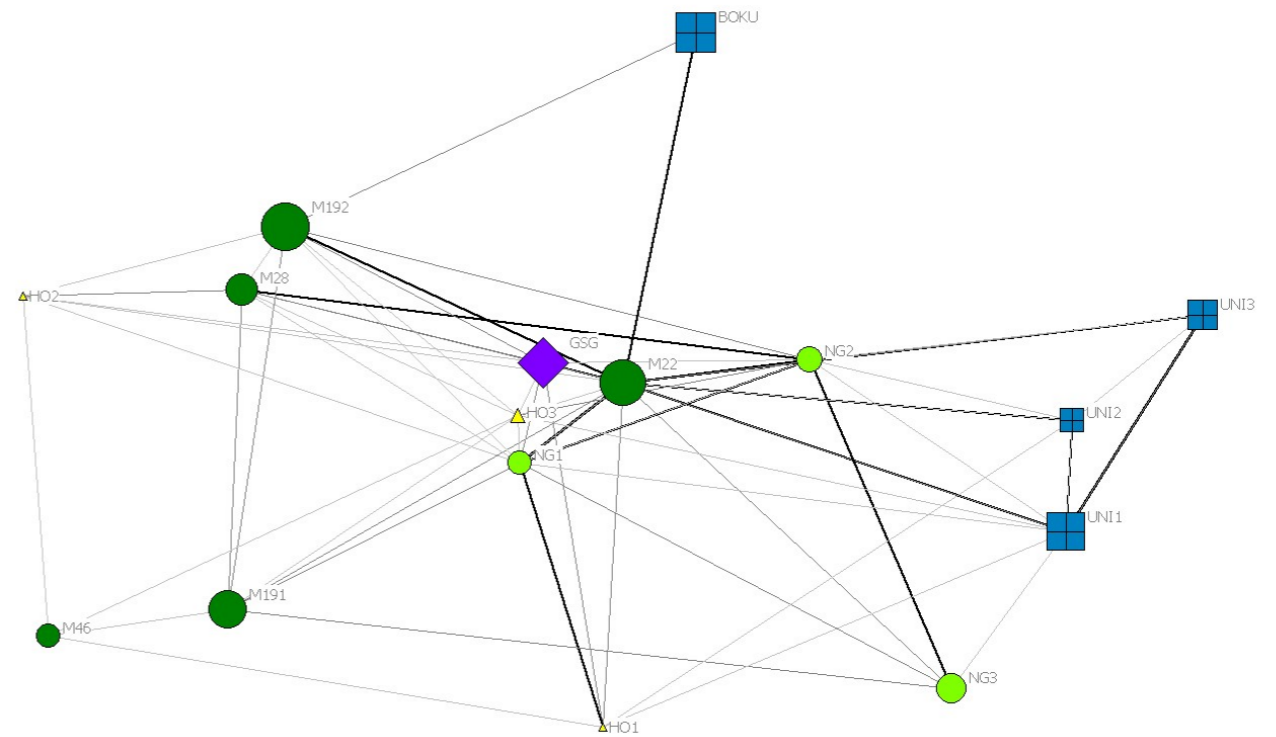
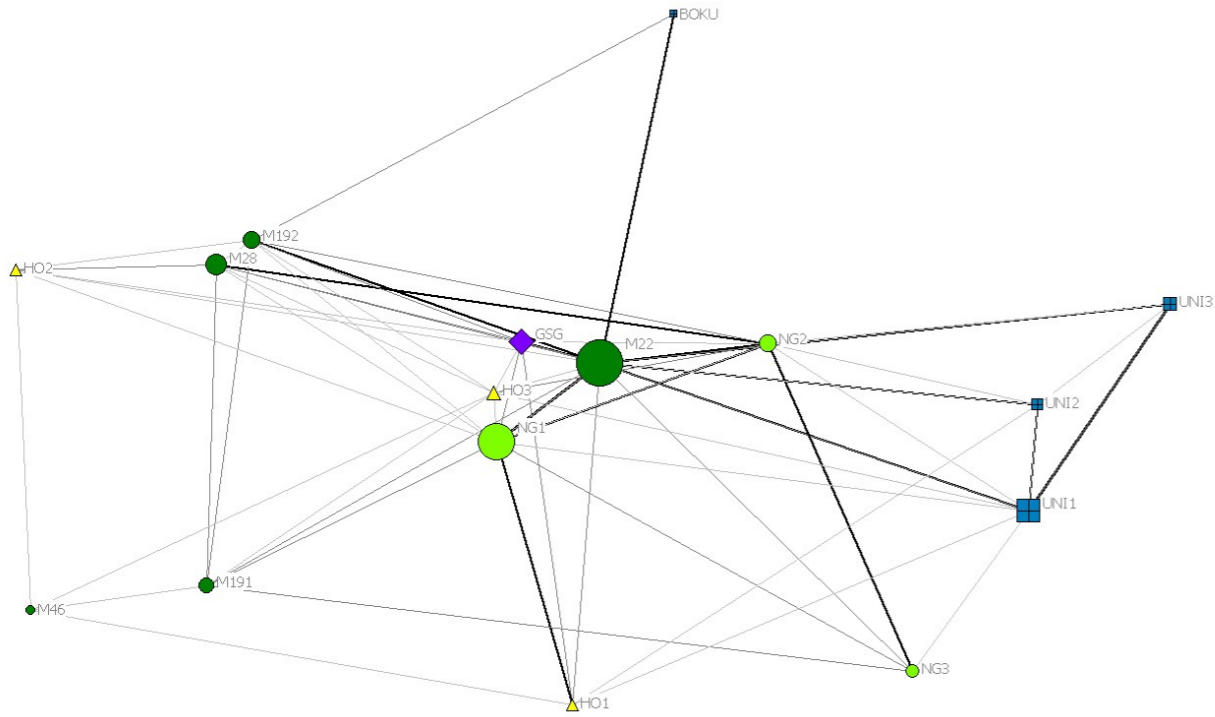
Layout: Geodesic distance

The number of links in the shortest path between the pair of the nodes; the fastest something could travel from one node to another. The nodes with shorter geodesic distances are closer together.

Whom do you talk to about work?

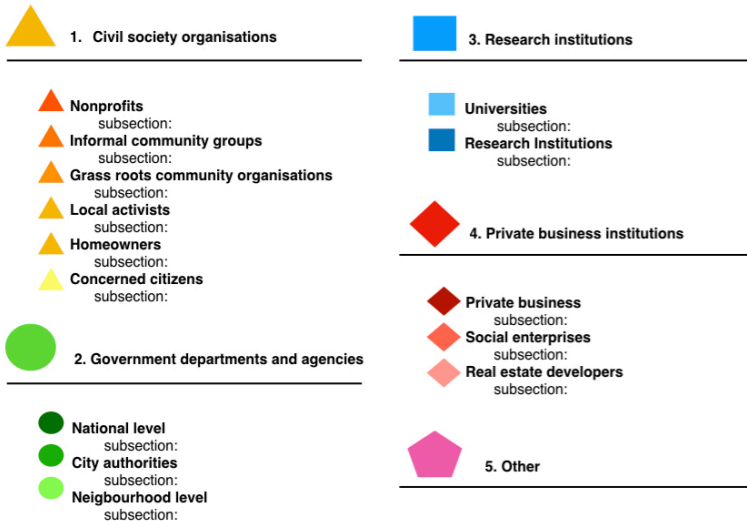
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Colour of a node: Affiliation Links: Formal communication



Size of a node: Percieved influence

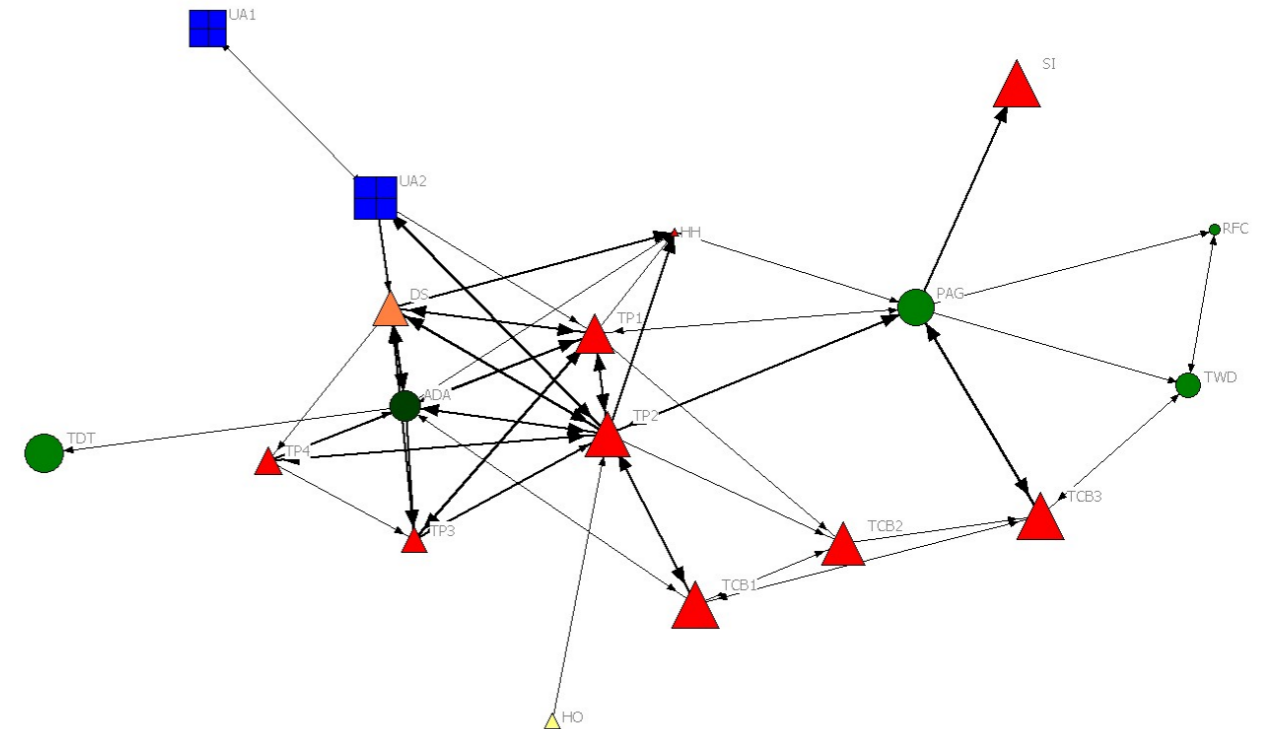
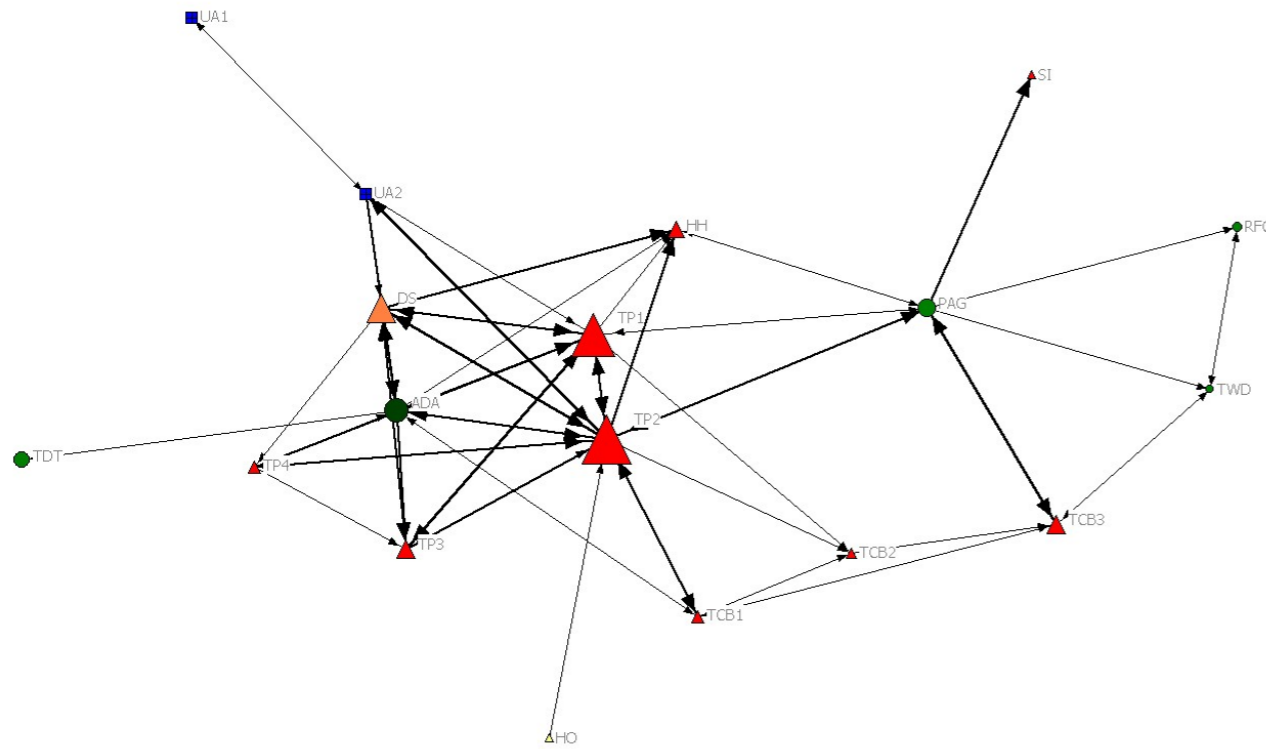
Size of a node: Level of knowledge utilisation



Whom do you talk to?

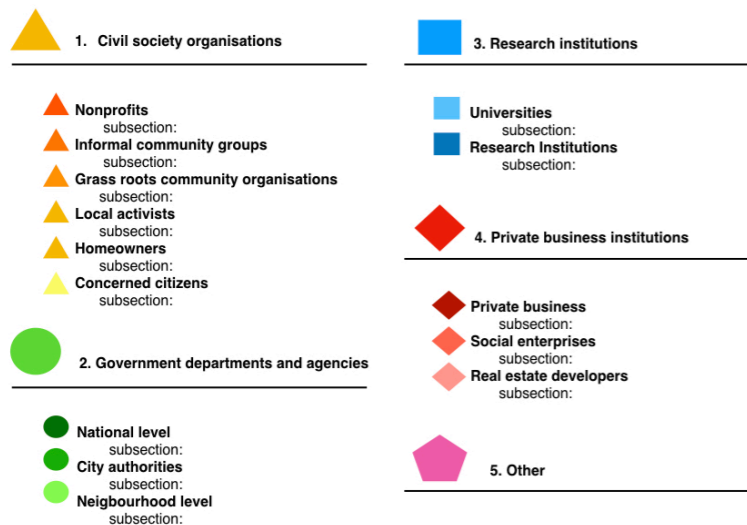
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Colour of a node: Affiliation Links: informal communication



Size of a node: Percieved influence

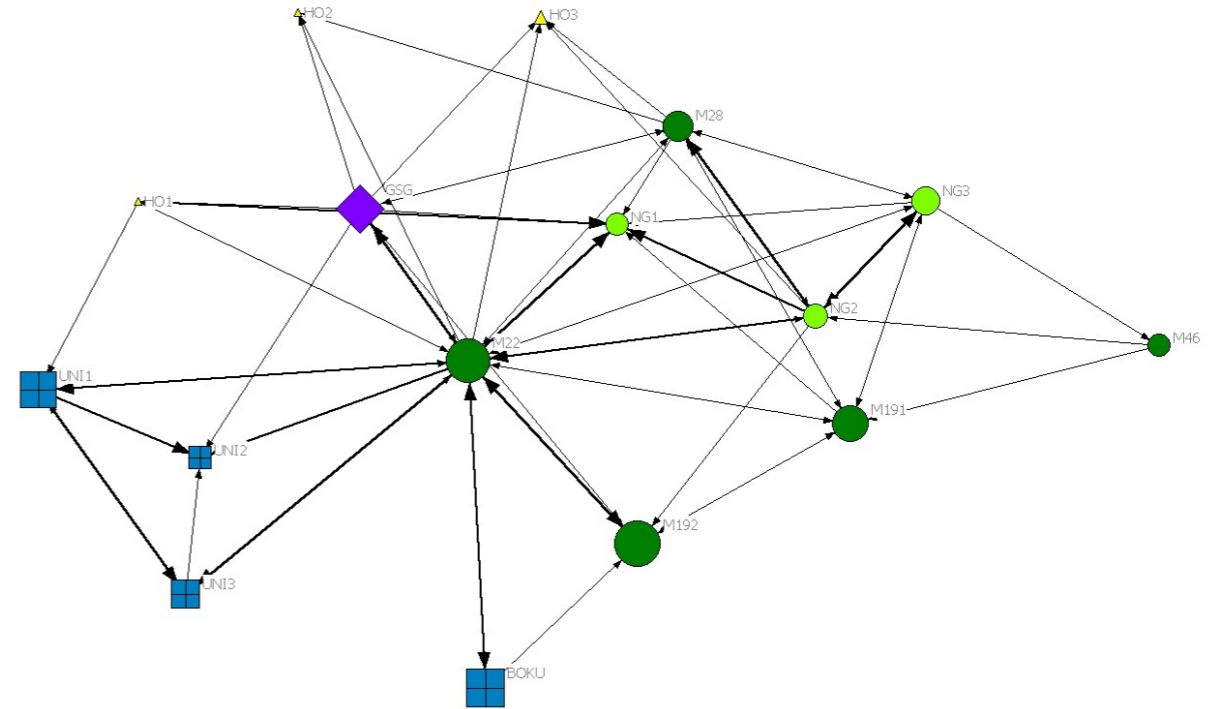
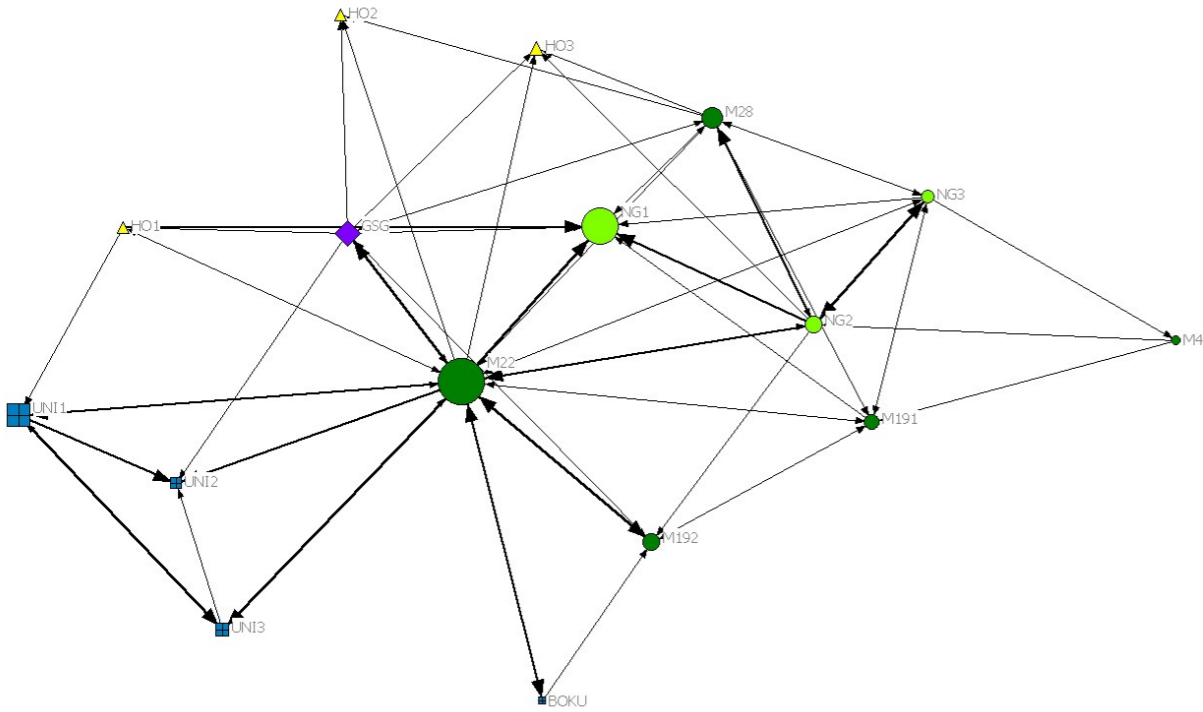
Size of a node: Level of knowledge utilisation



Whom do you talk to?

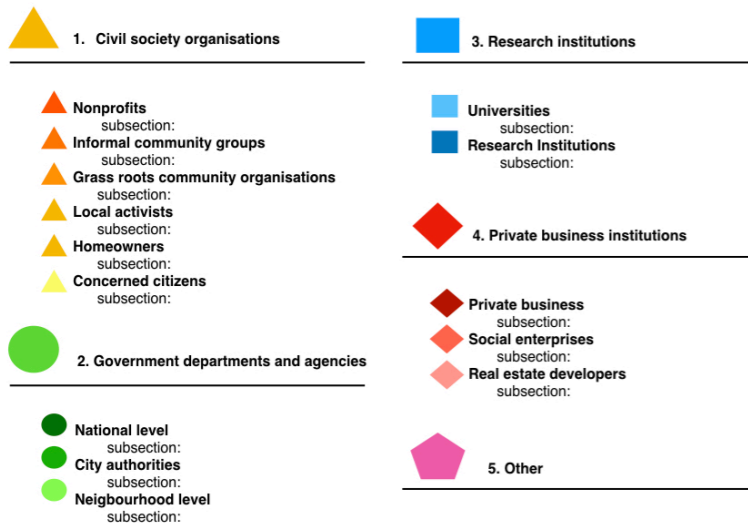
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Colour of a node: Affiliation Links: informal communication



Size of a node: Percieved influence

Size of a node: Level of knowledge utilisation

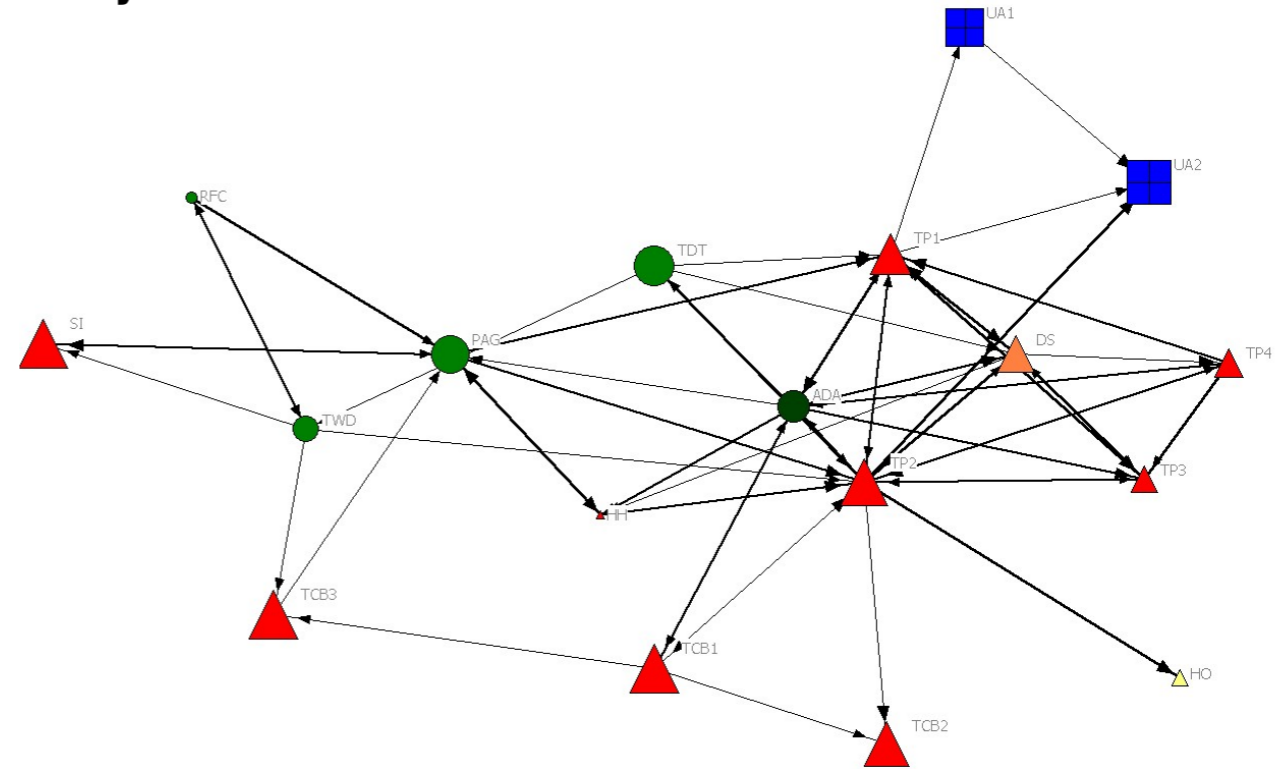
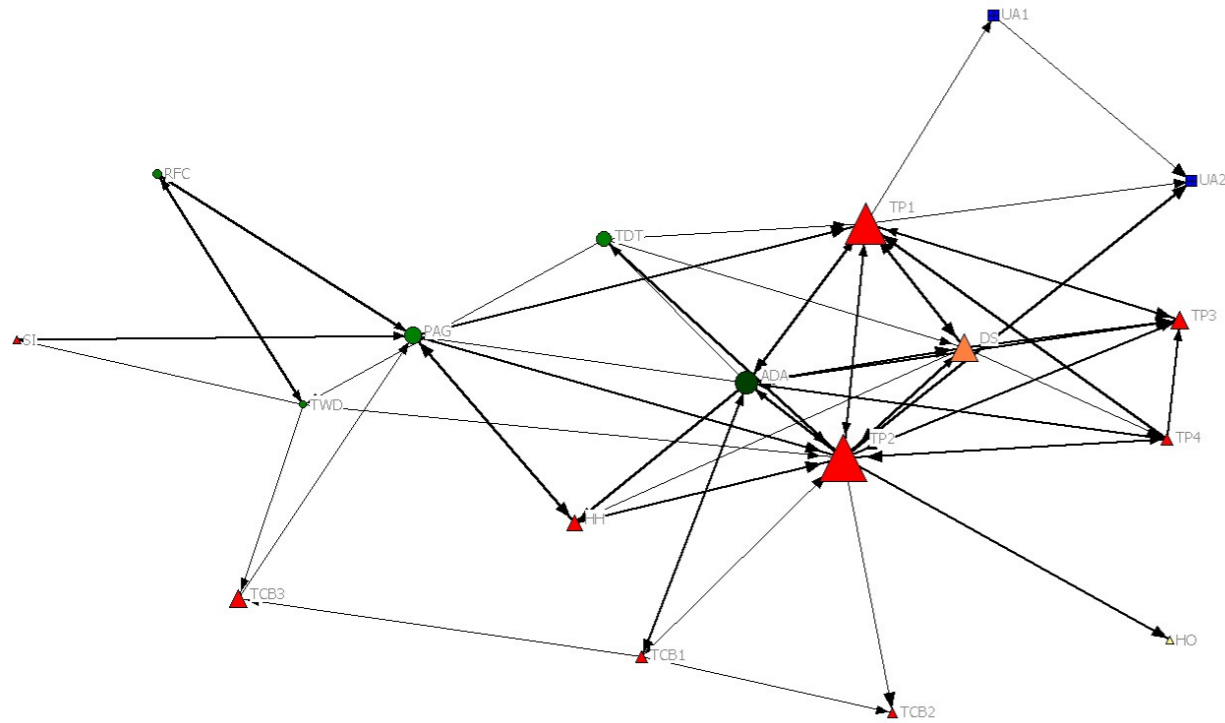


I provide this person with the outputs from my work.

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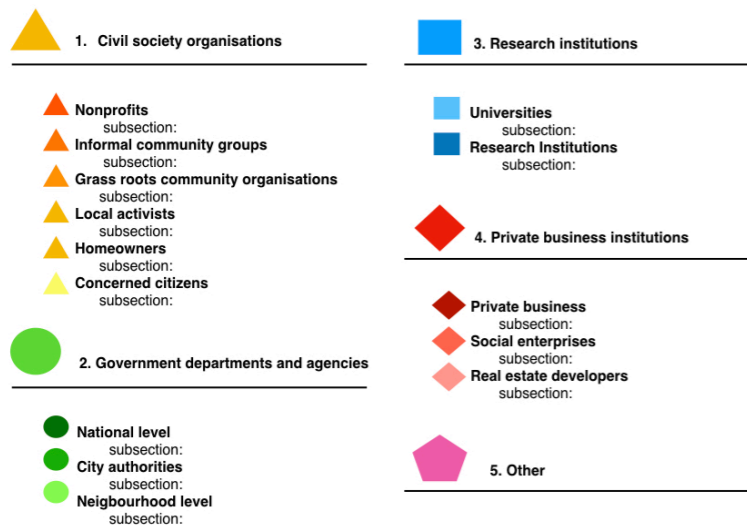
Colour of a node: Affiliation

Links: Formal authority



Size of a node: Percieved influence

Size of a node: Level of knowledge utilisation

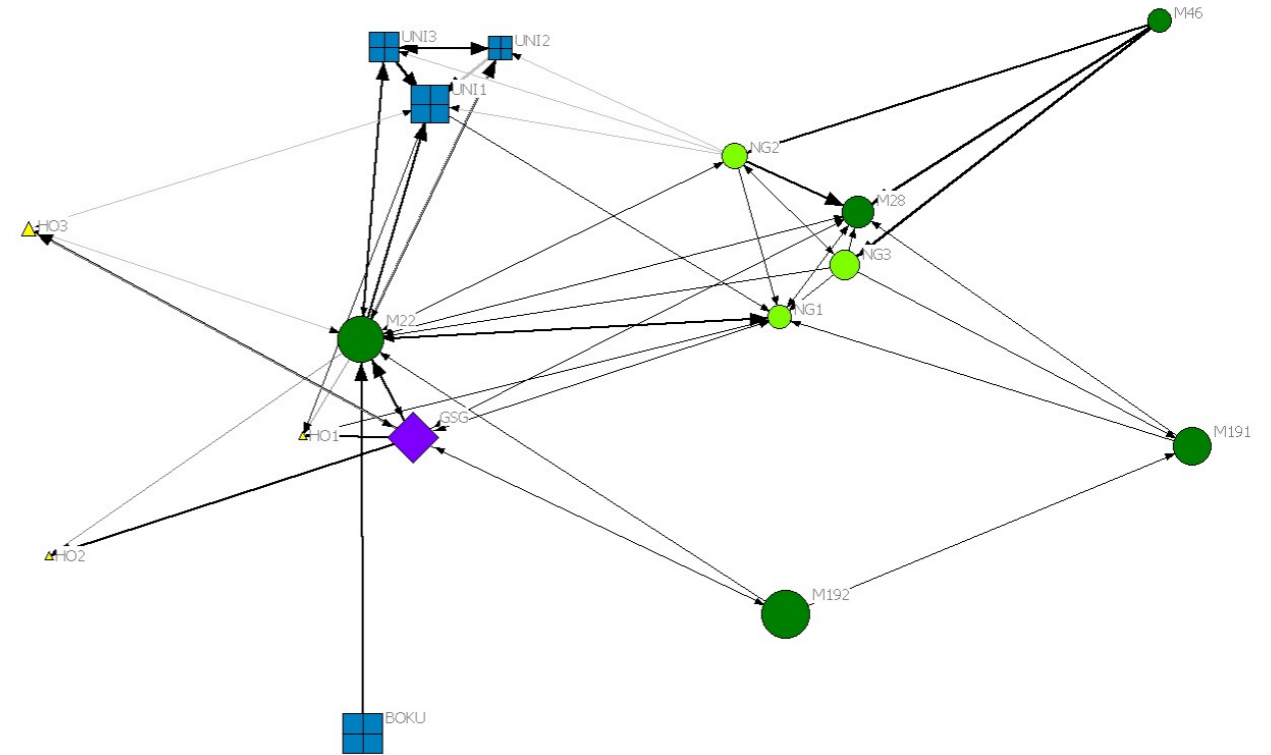
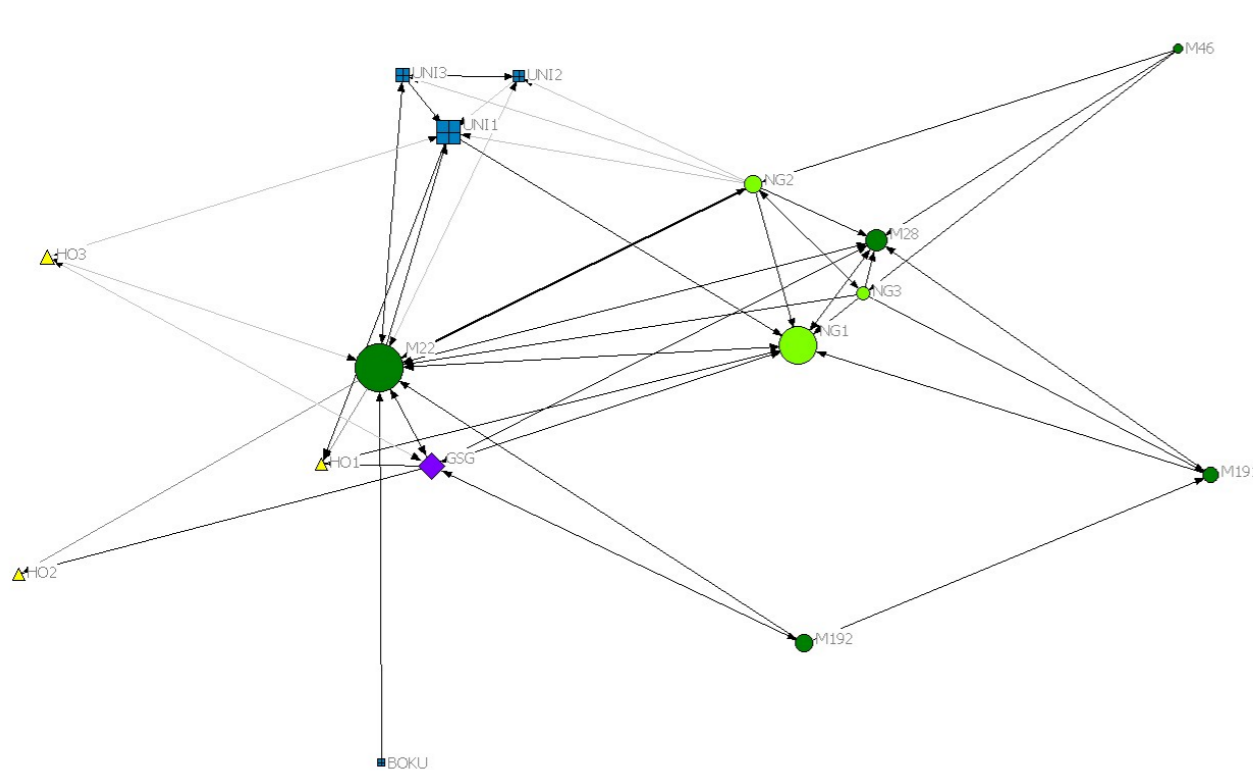


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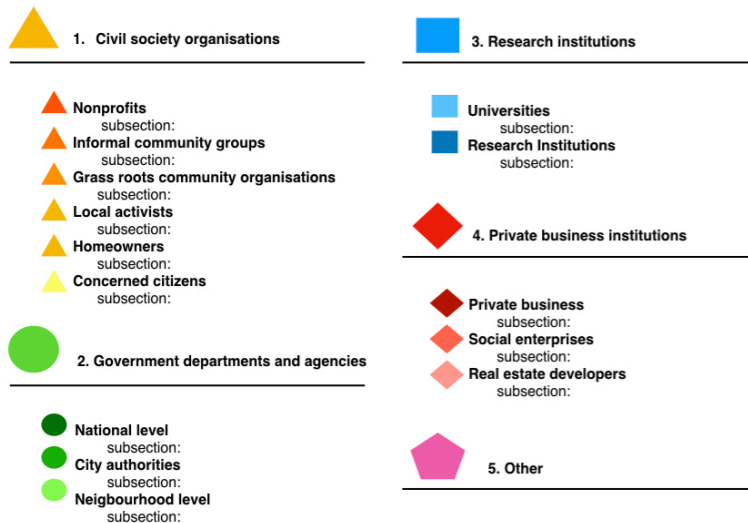
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Size of a node: Percieved influence

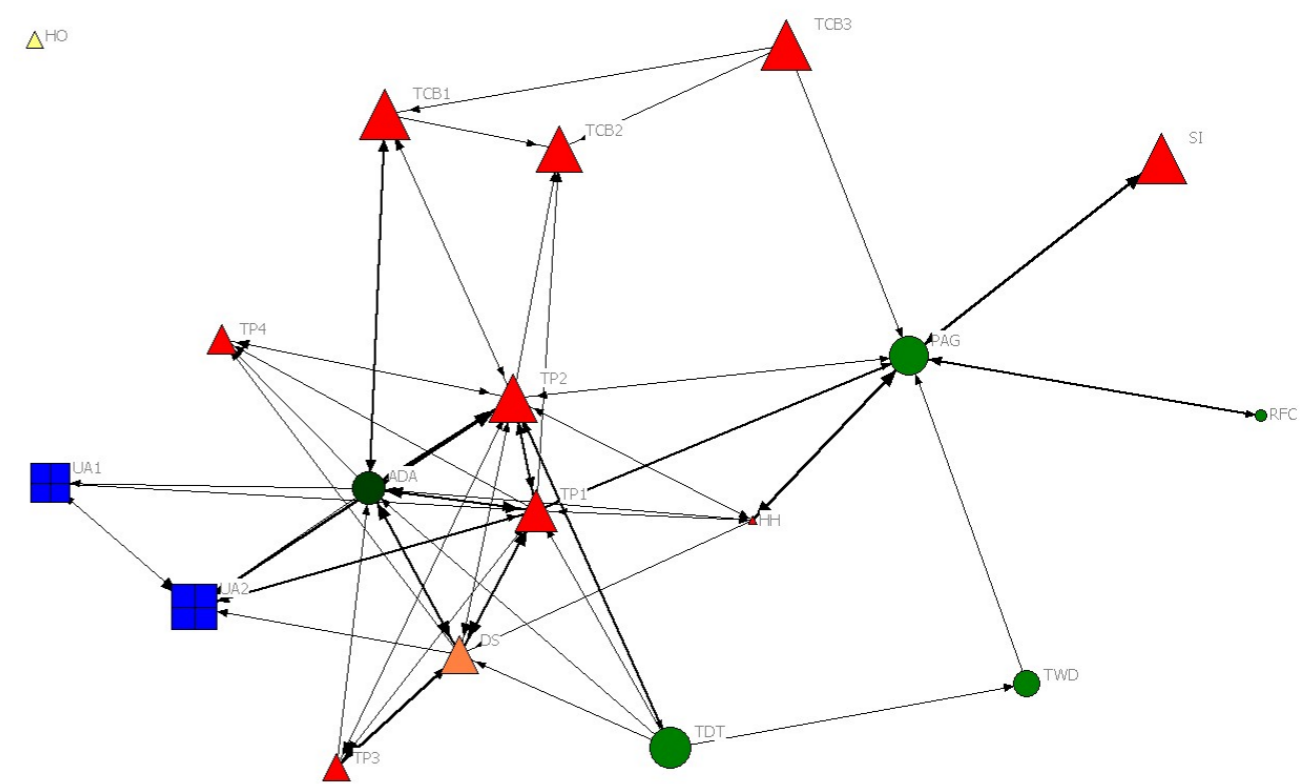
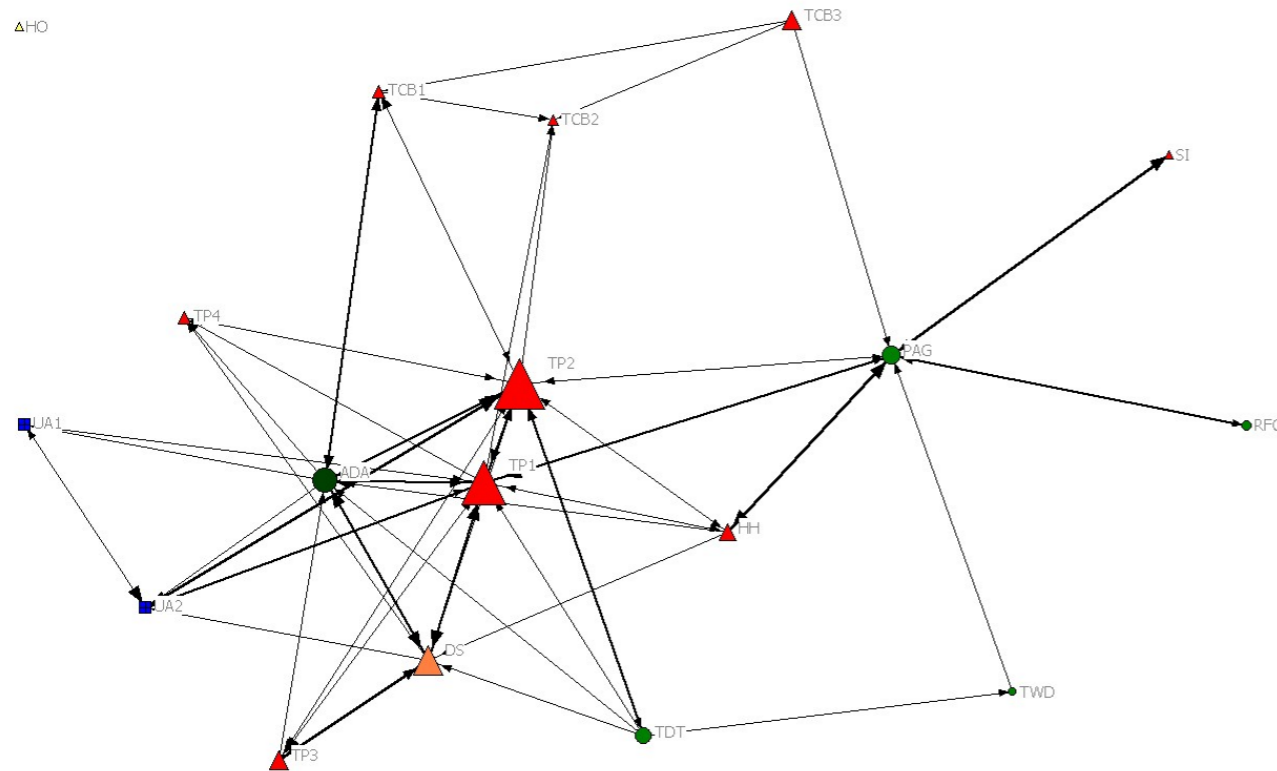
Size of a node: Level of knowledge utilisation



I received professional assistance from this person.

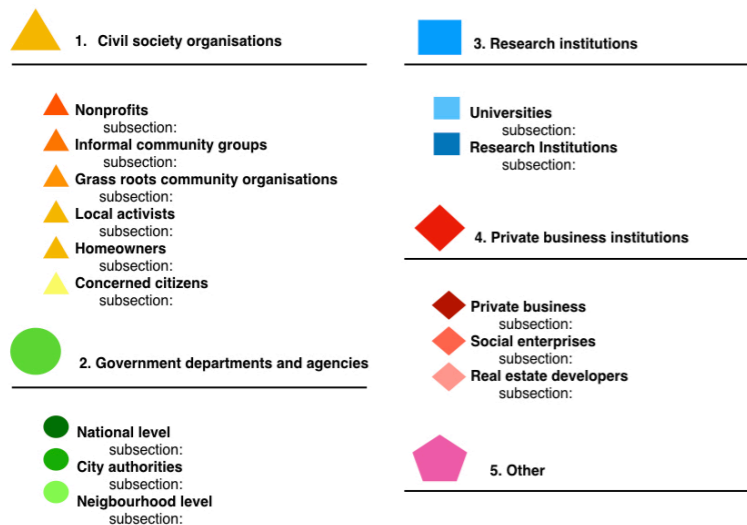
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Colour of a node: Affiliation Links: Percieved competence



Size of a node: Percieved influence

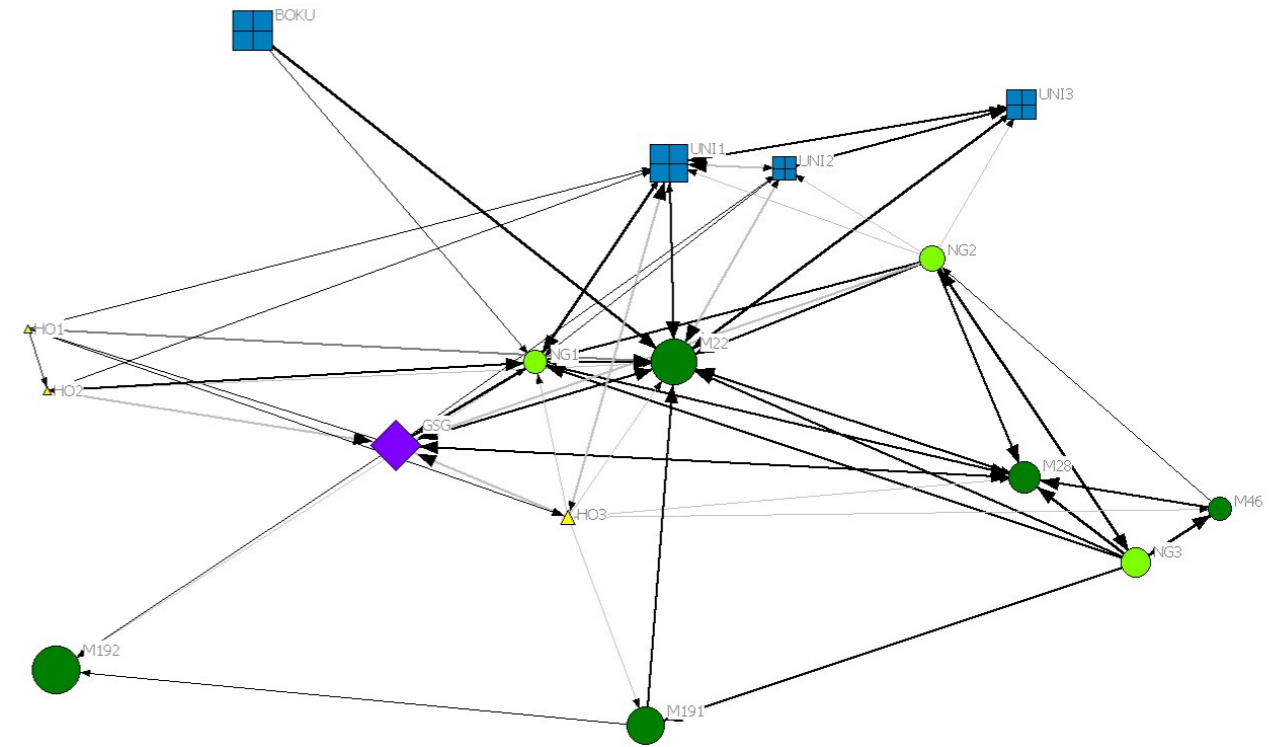
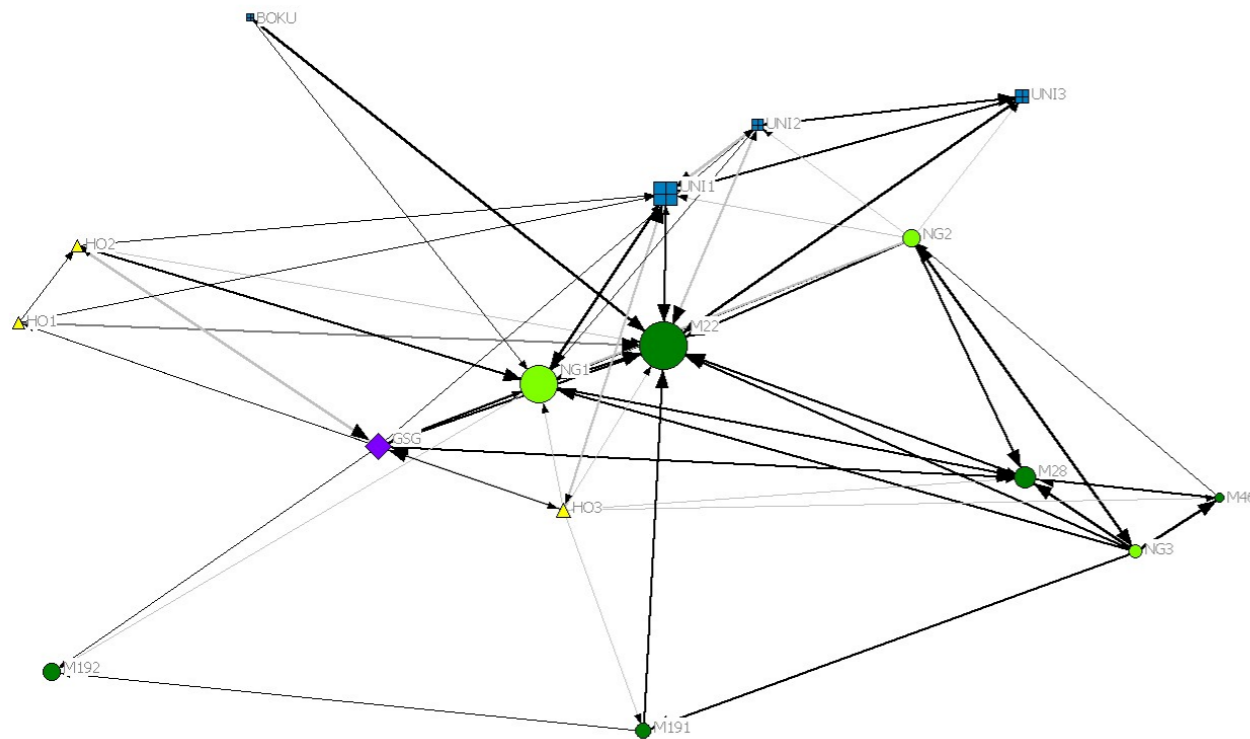
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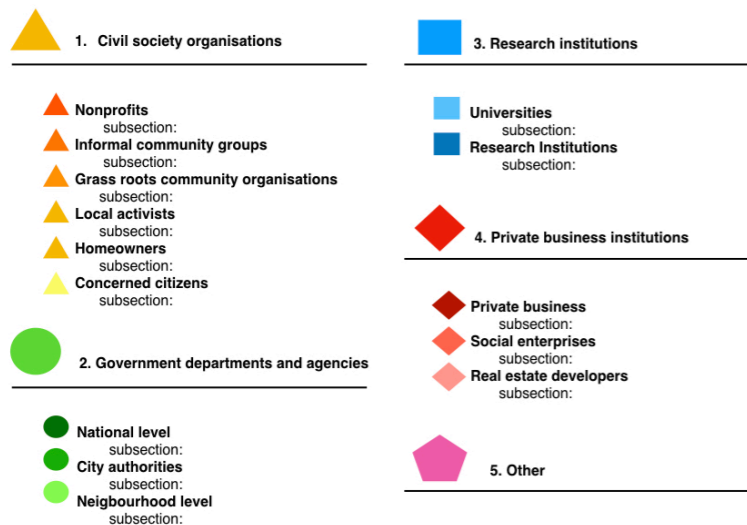
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Size of a node: Percieved influence

Size of a node: Level of knowledge utilisation

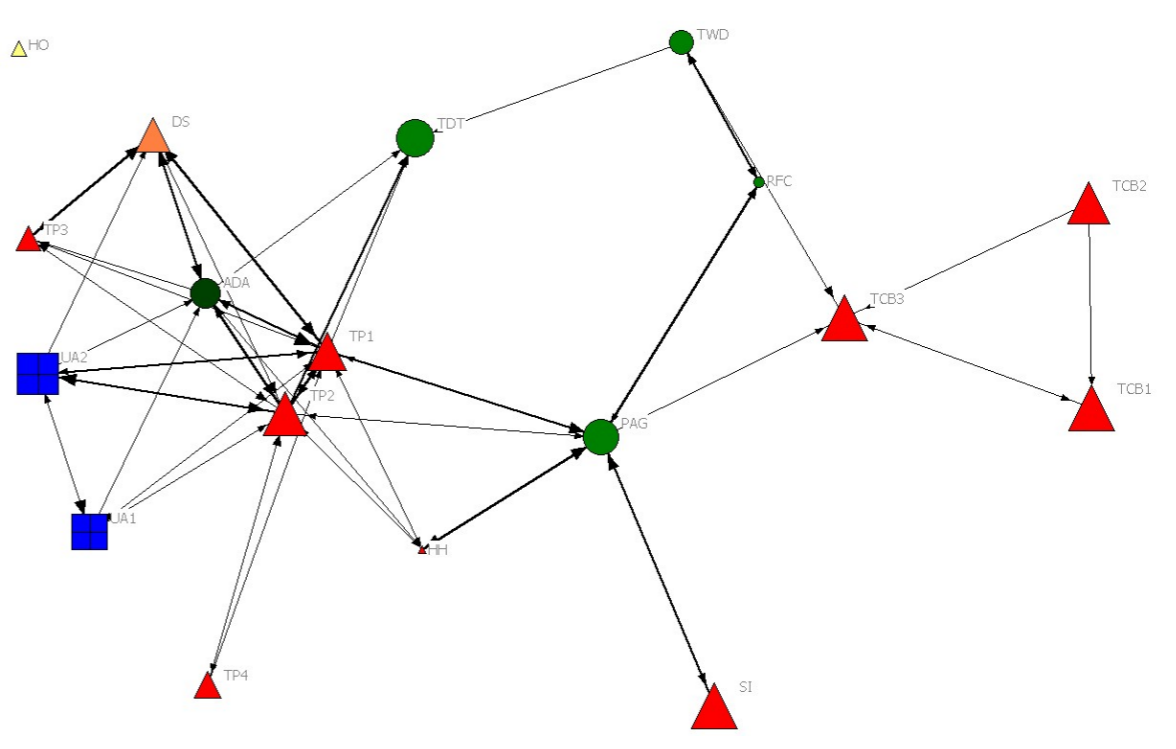
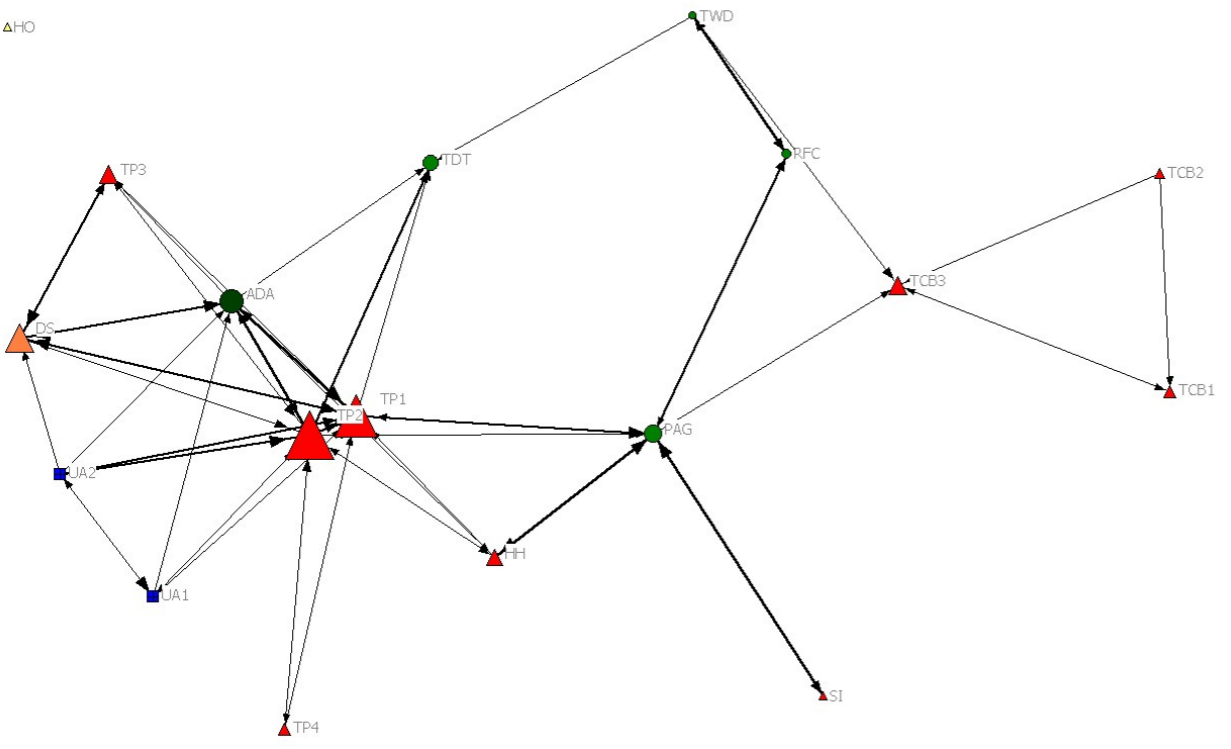


This person has ability to help me.

TUCSON

Colour of a node: Affiliation

Links: Ability to help



Size of a node: Percieved influence

Size of a node: Level of knowledge utilisation

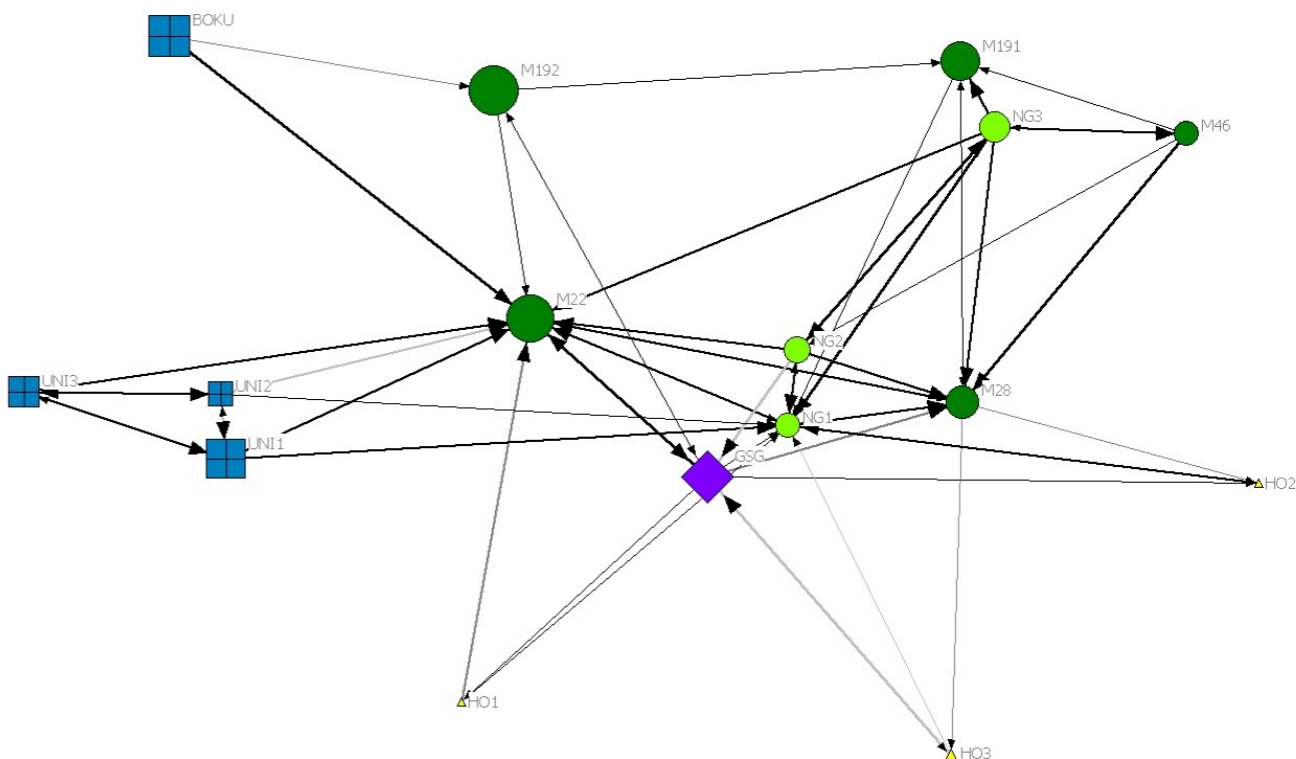
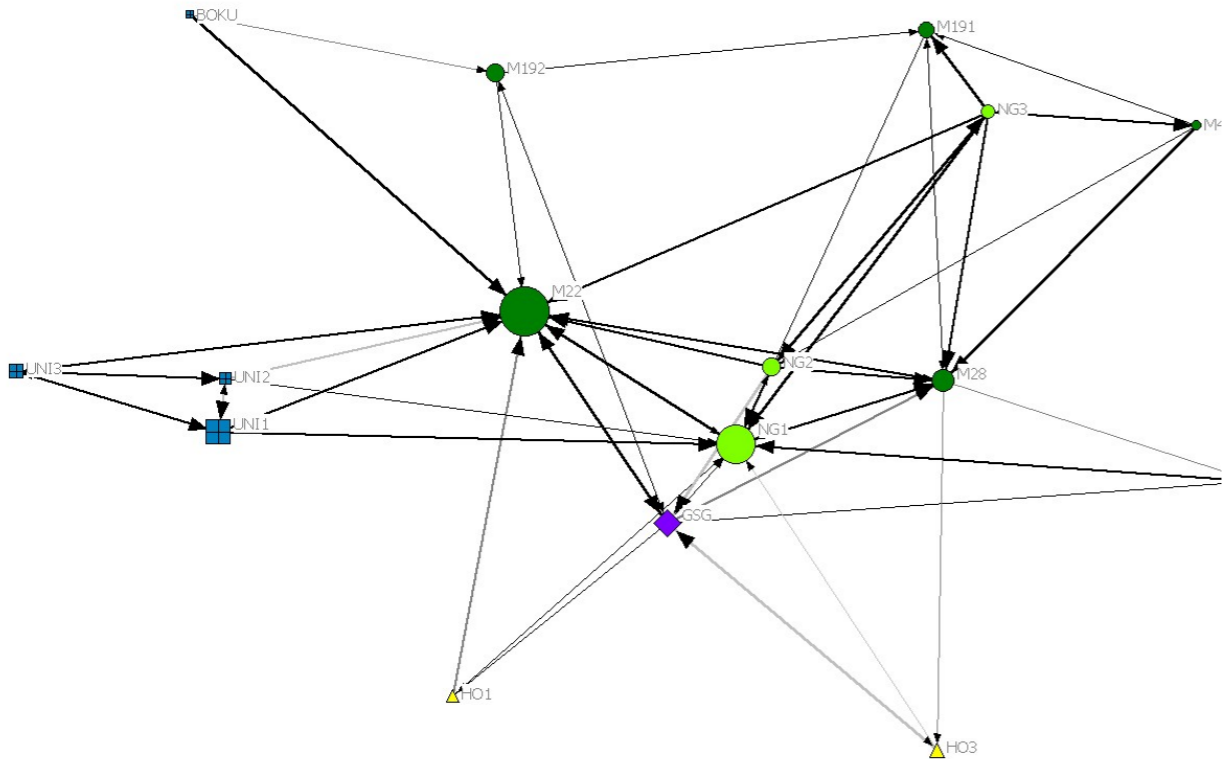
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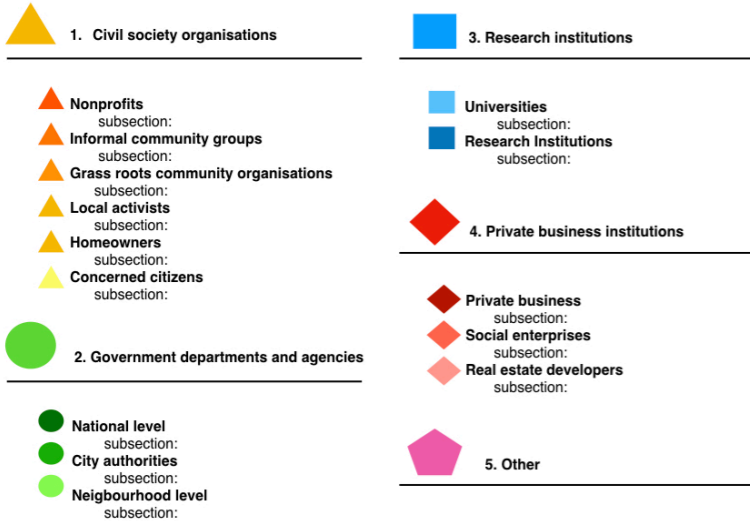
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Links: Ability to help



Size of a node: Percieved influence

Size of a node: Level of knowledge utilisation

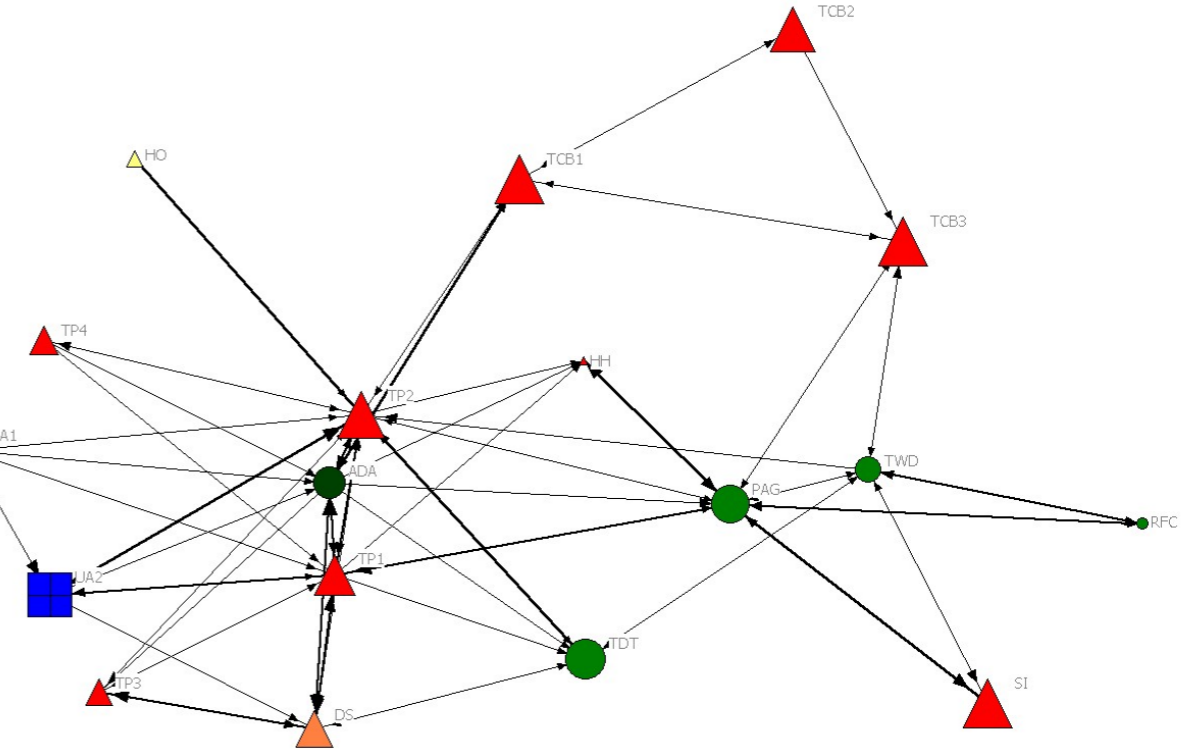
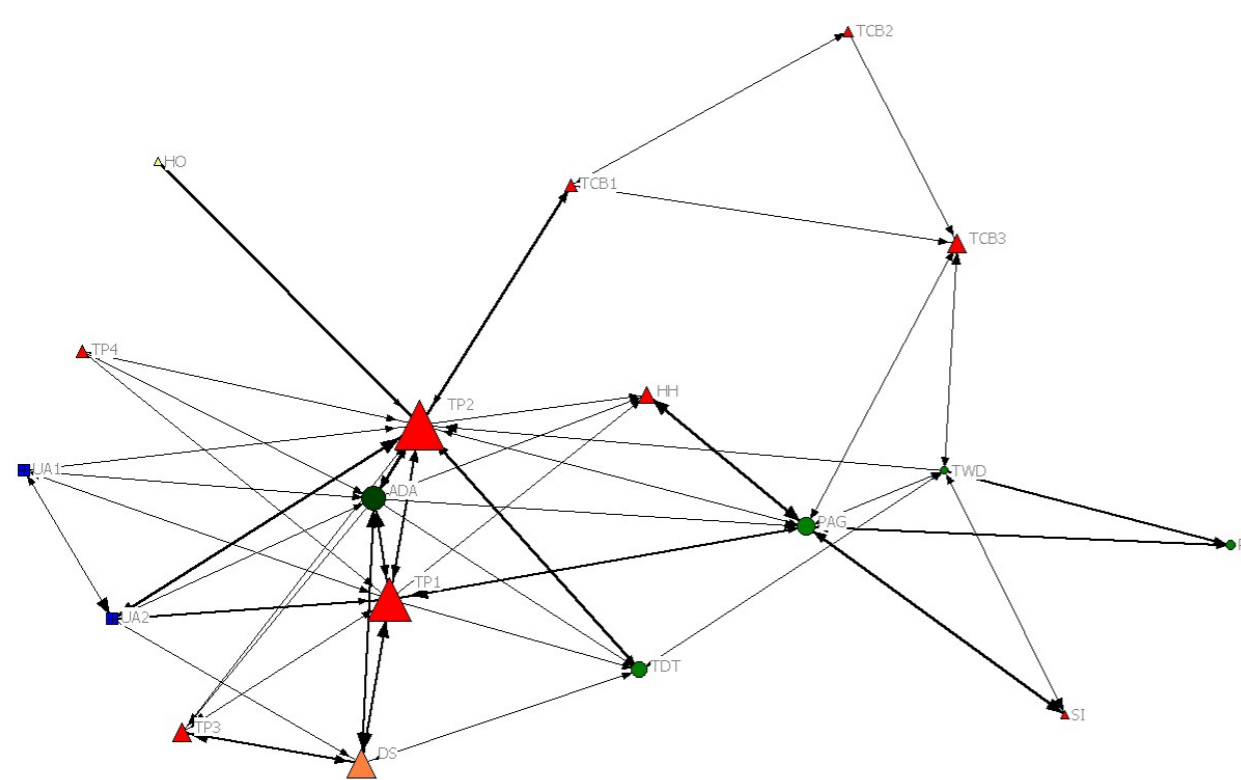


This person is assessible to me.

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Colour of a node: Affiliation

Links: Assesibility



Size of a node: Percieved influence

Size of a node: Level of knowledge utilisation

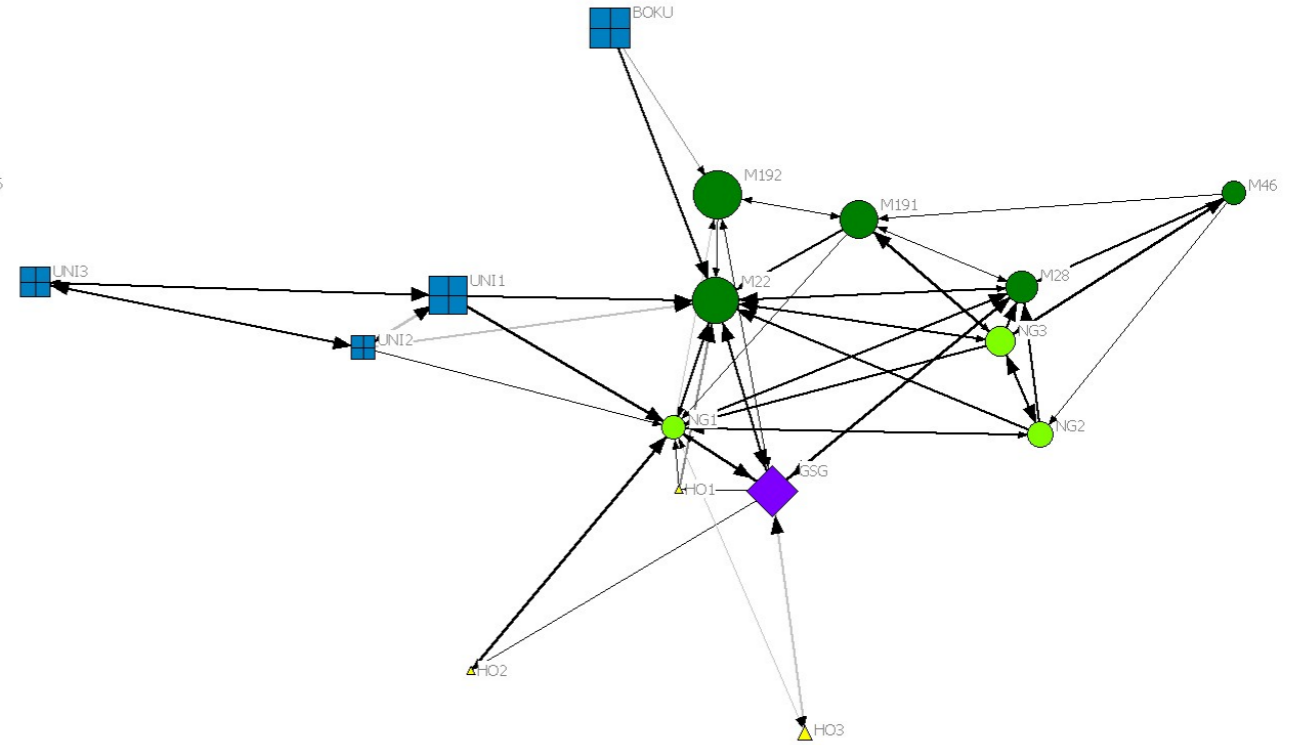
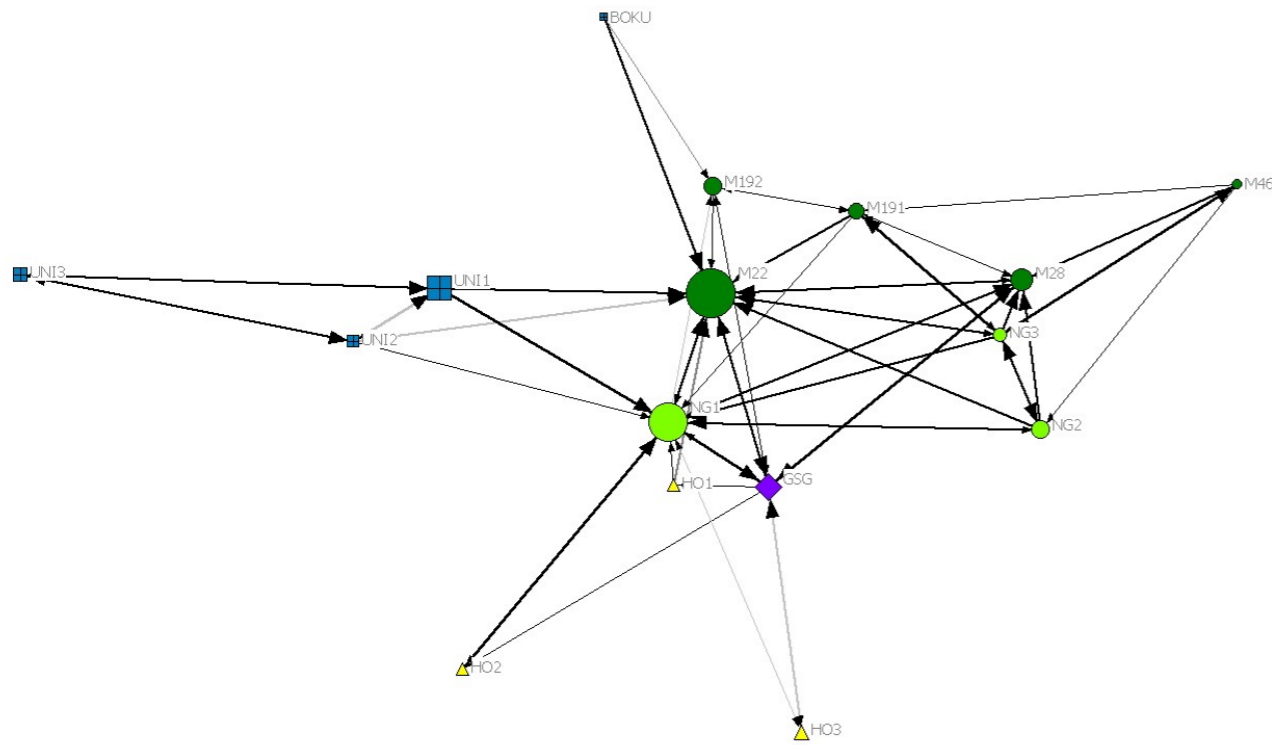
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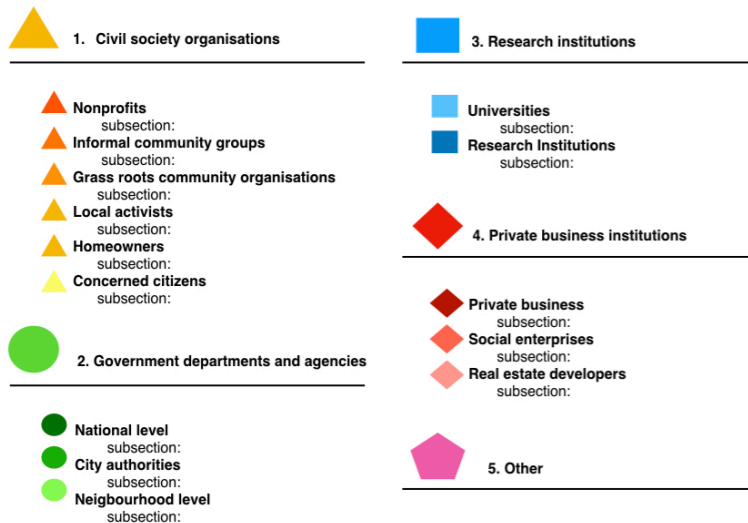
Colour of a node: Affiliation

Links: Assesibility



Size of a node: Percieved influence

Size of a node: Level of knowledge utilisation



data analysis

Where are the discrepancies between the actors' influence and the knowledge in governance networks? Where is both knowledge and influence accumulated?

Sector/ Institution/ Department	Actor's betweenness centrality in a specific network	Actor's perceived influence	Actor's level of knowledge utilisation
Actor 1	0.03	0.01	0.78
Actor 2	0.045	0.34	0.56
Actor 3	0.679	0.67	0.01
....	

Where are the discrepancies between the centrality, perceived influence and level of knowledge utilisation in different kind of actors' relations in governance networks?

data analysis

Strategic governance network management for ecological knowledge utilisation:		
	High centrality in specific network	Low centrality in specific network
High Influence/high knowledge	▲ MA23 ■ PIC ▲ OBZ	● CC ■ UNI2
High Influence/low knowledge	▲ DC ● M12 ▲ OPZ	◆ SE2
Low Influence/high knowledge	■ UNI1	◆ SE3 ▲ MA20
Low Influence/low knowledge	▲ KW ▲ OPZ1 ◆ SE ● CO1	▲ KW

outputs

Outputs: results that allow strategic network management, strategic knowledge management

Strategic governance network management for ecological knowledge utilisation:		
	High centrality in specific network (6 different relations)	Low centrality in specific network (6 different relations)
High Influence/high knowledge	<i>most important players, already recognised, give them attention, education and power to distribute new norms</i>	<i>important but not recognised players, connect them more, empower them</i>
High Influence/low knowledge	<i>educate them, urgently connect them to high knowledge actors</i>	<i>educate them, connect them to high knowledge actors</i>
Low Influence/high knowledge	<i>connect them to more more central actors, with higher influence</i>	<i>connect them to more more central actors with higher influence</i>
Low Influence/low knowledge	<i>disempower them, connect them to more knowledgable actors</i>	<i>cut them out of the network, educate them</i>

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