

Overview

1.) Basic Introduction & Mapping exercise

Result: 29 maps with 358 concepts

2.) Group mapping:

Facilitate mapping exercise

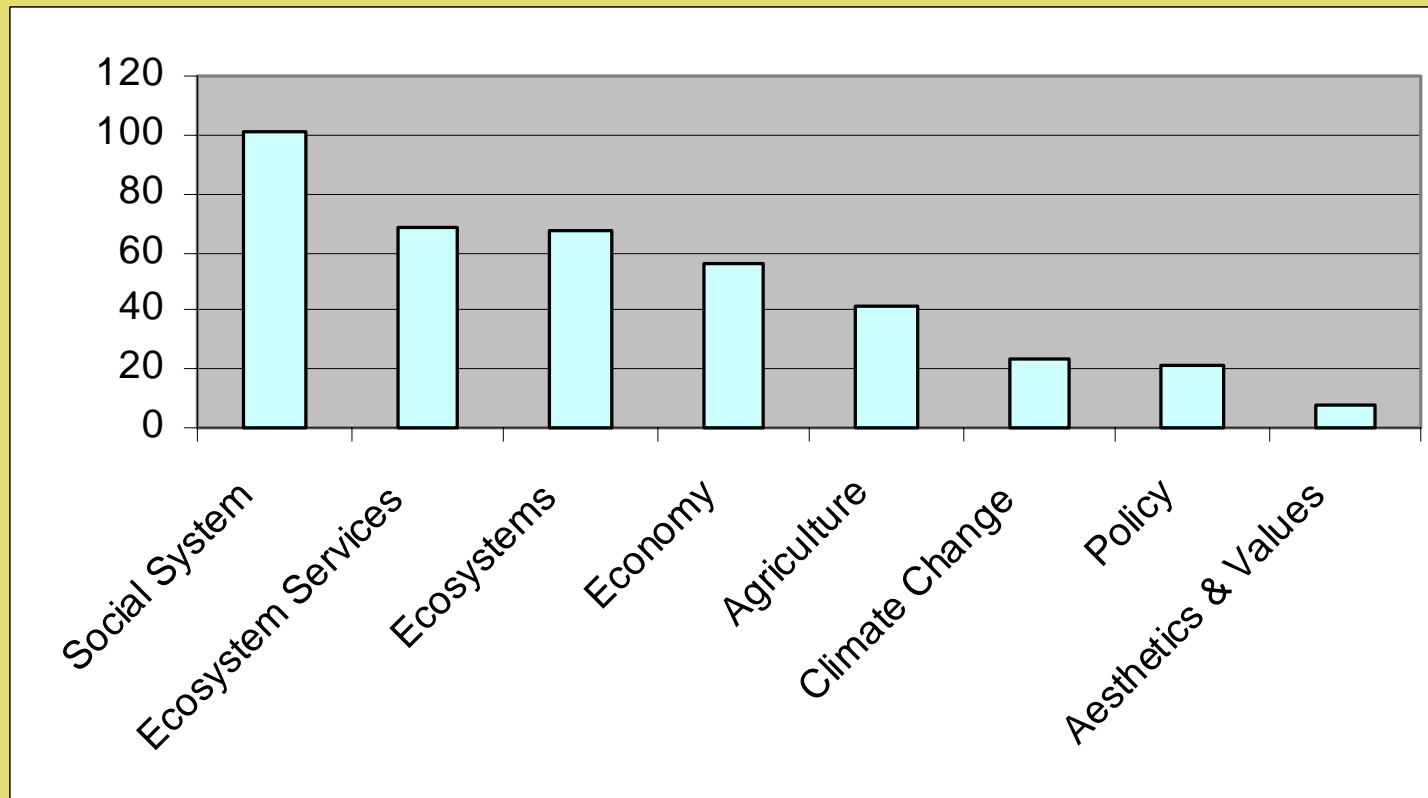
3.) Short introduction into analysis of FCM

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Distribution over 8 categories

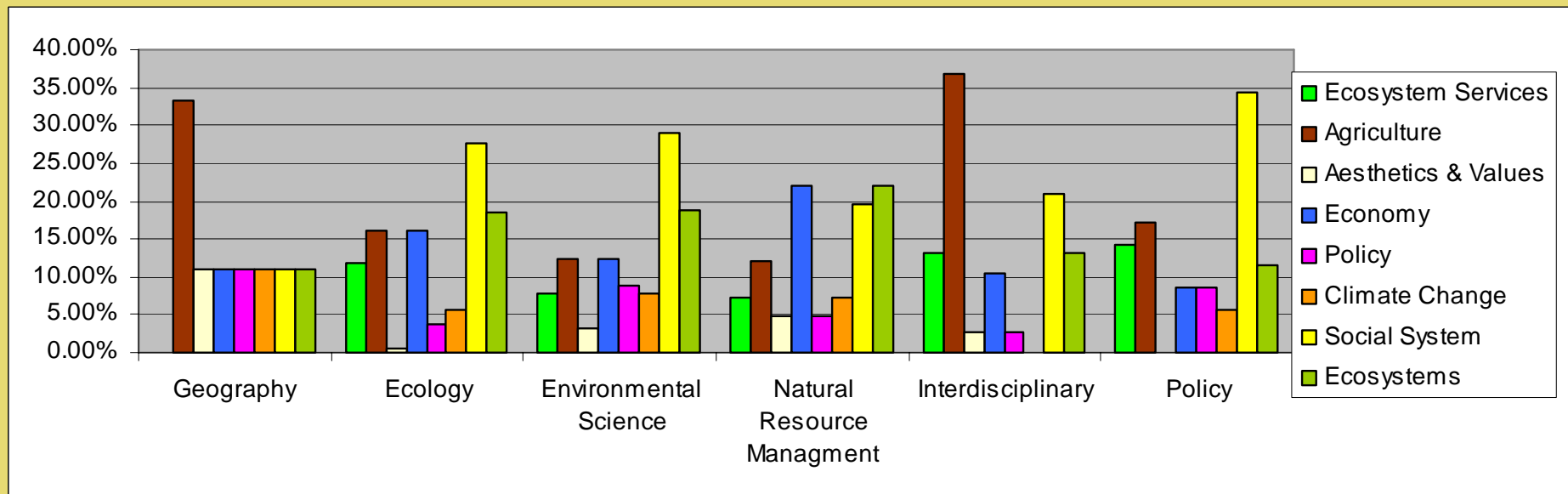


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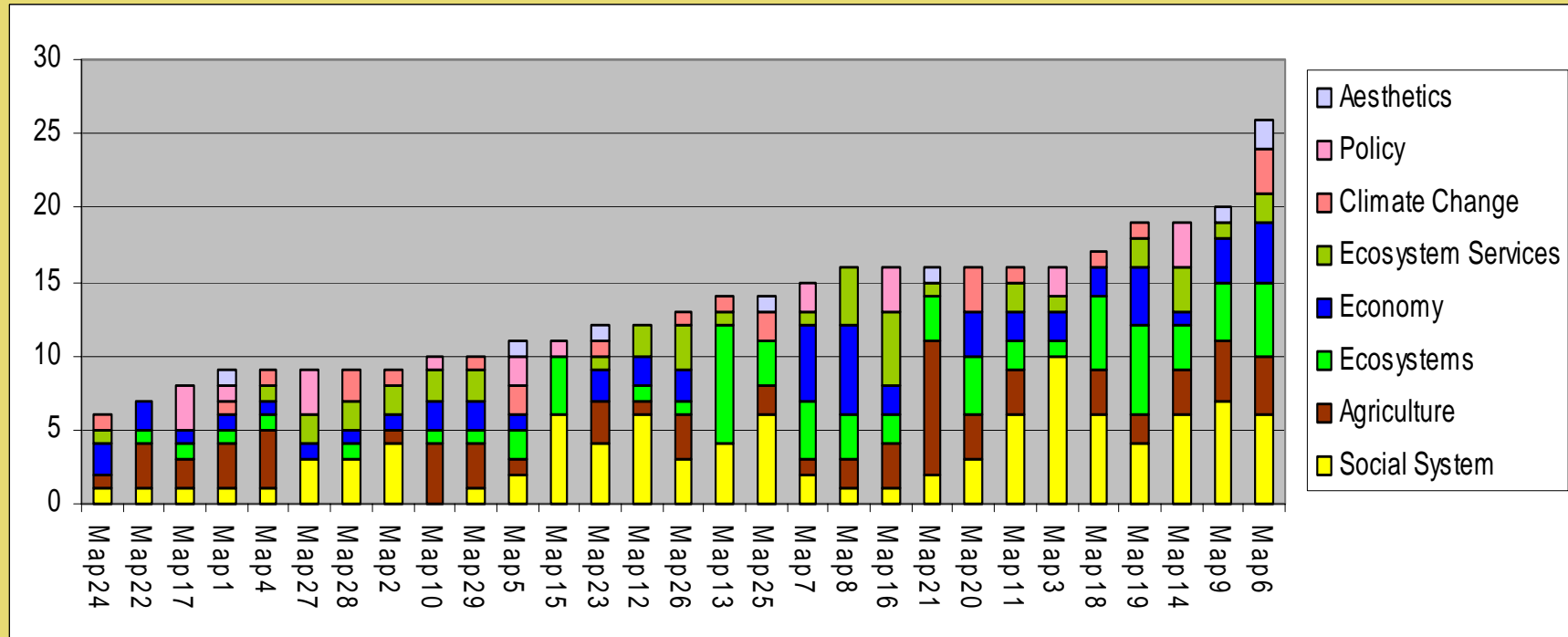
Disciplinary distribution



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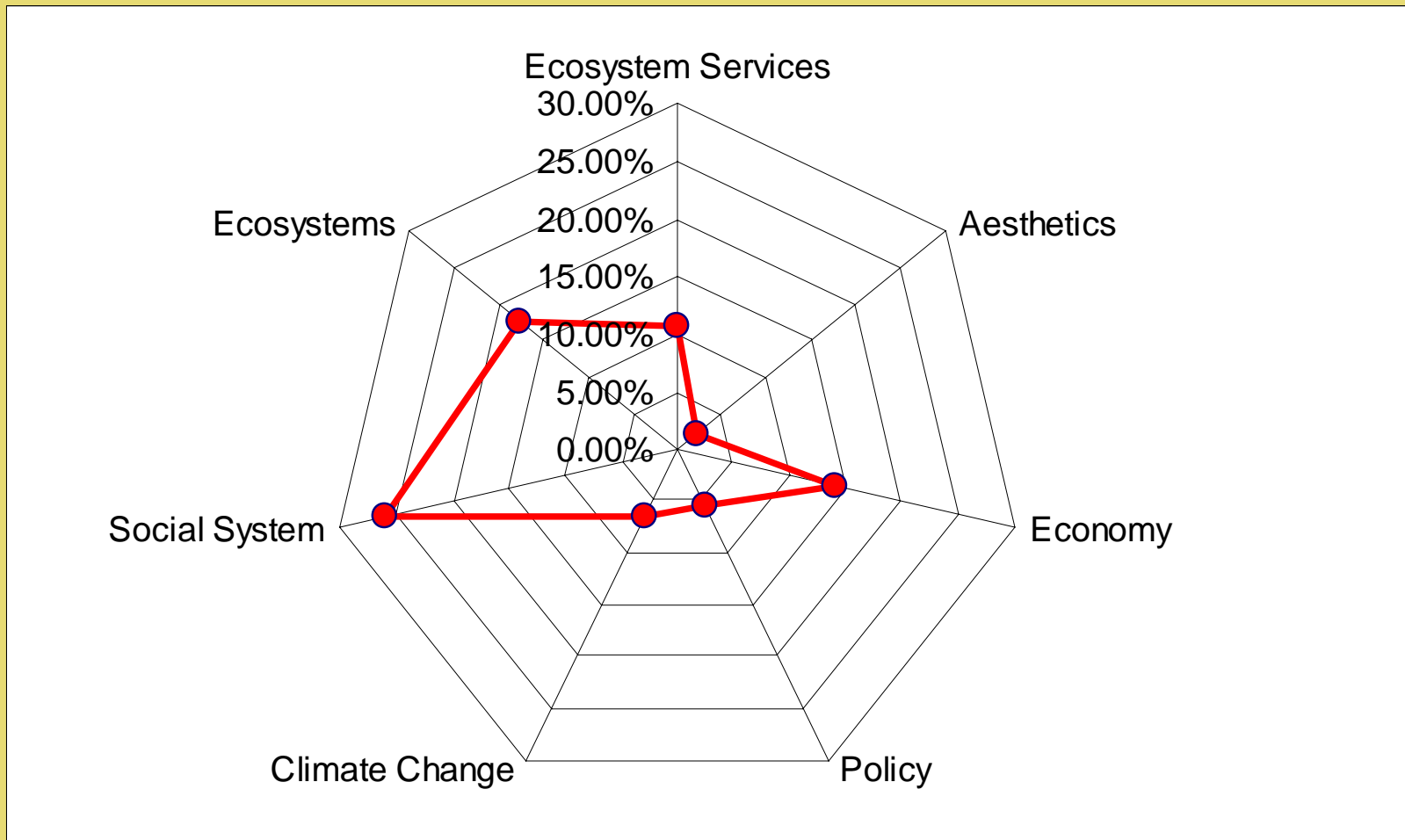
Size of Maps



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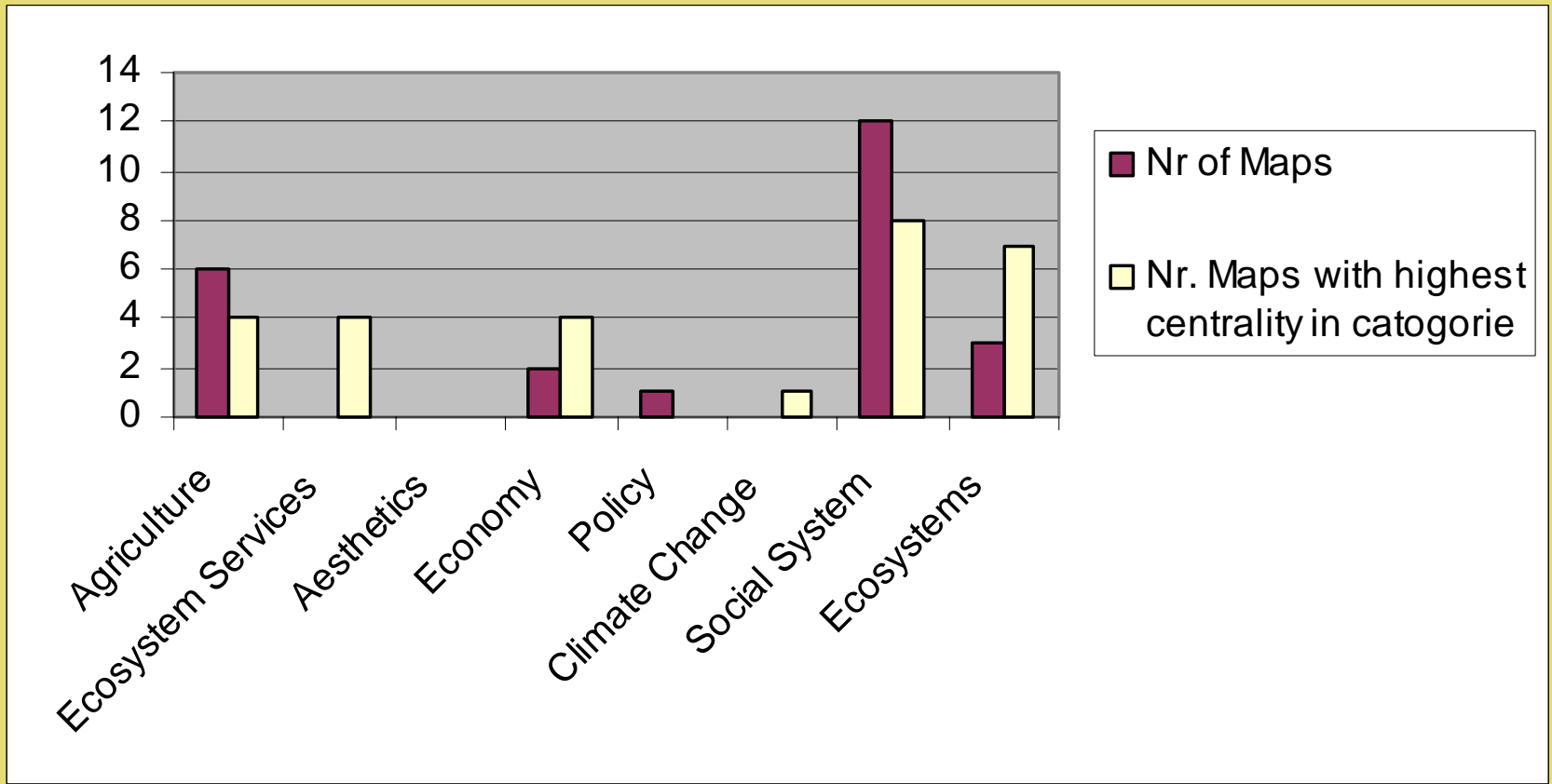
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FCM indices

Graph theory enables us to calculate a row of indices, that describe the structure of FCMs and characterize single concepts

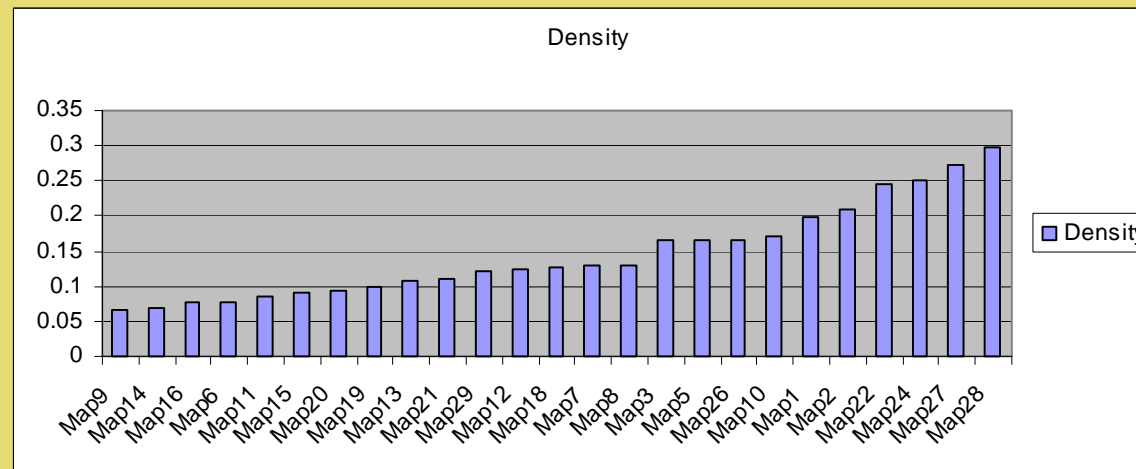
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Density (D)

- shows how highly the factors are connected to each other within the network. It was calculated by dividing the number of counted connections (C) by the number of possible connections between N factors (Hage & Harary 1983).

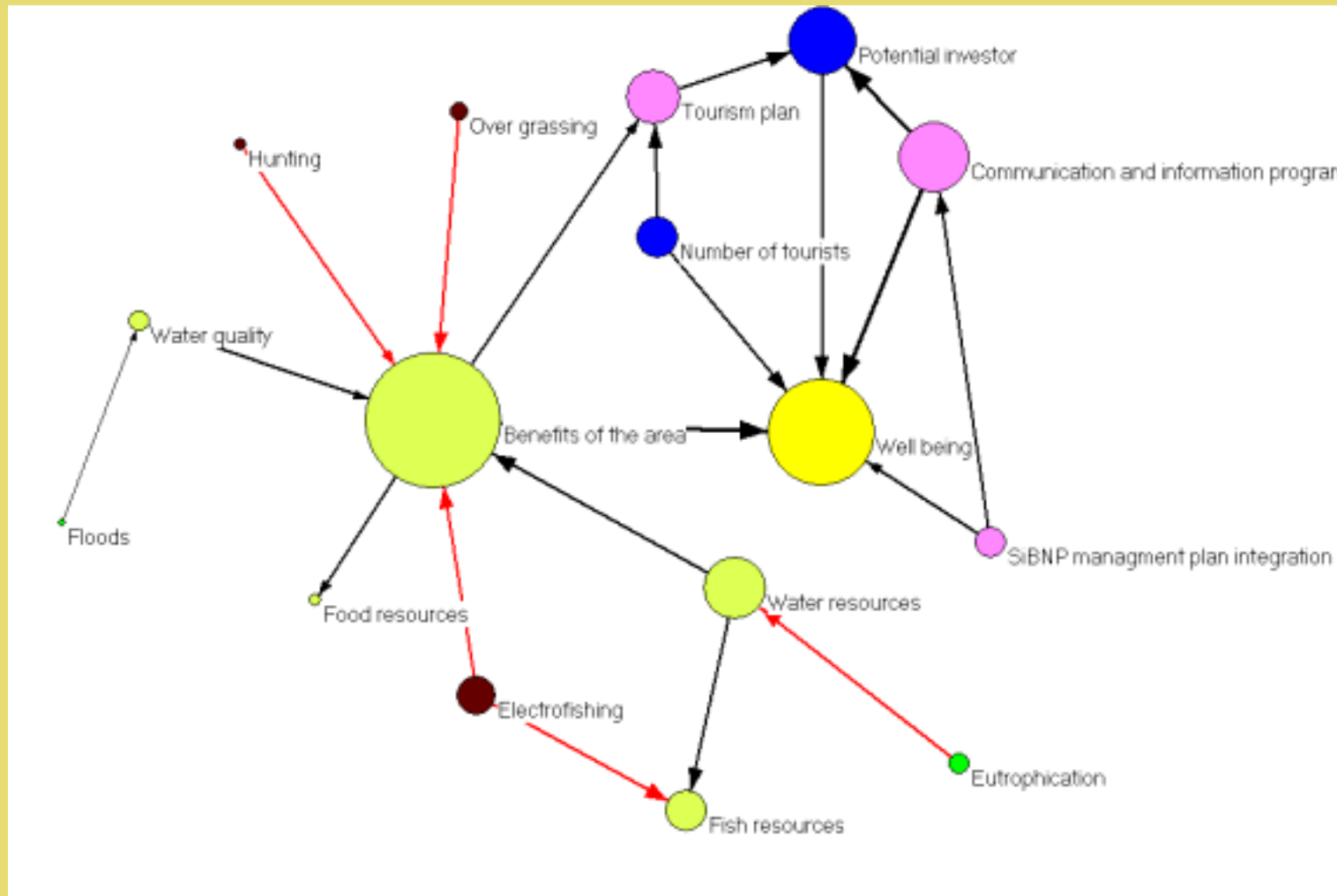


[1] Hage P, Harary F (1983) Structural Models in Anthropology. Oxford University Press, New York

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Low density

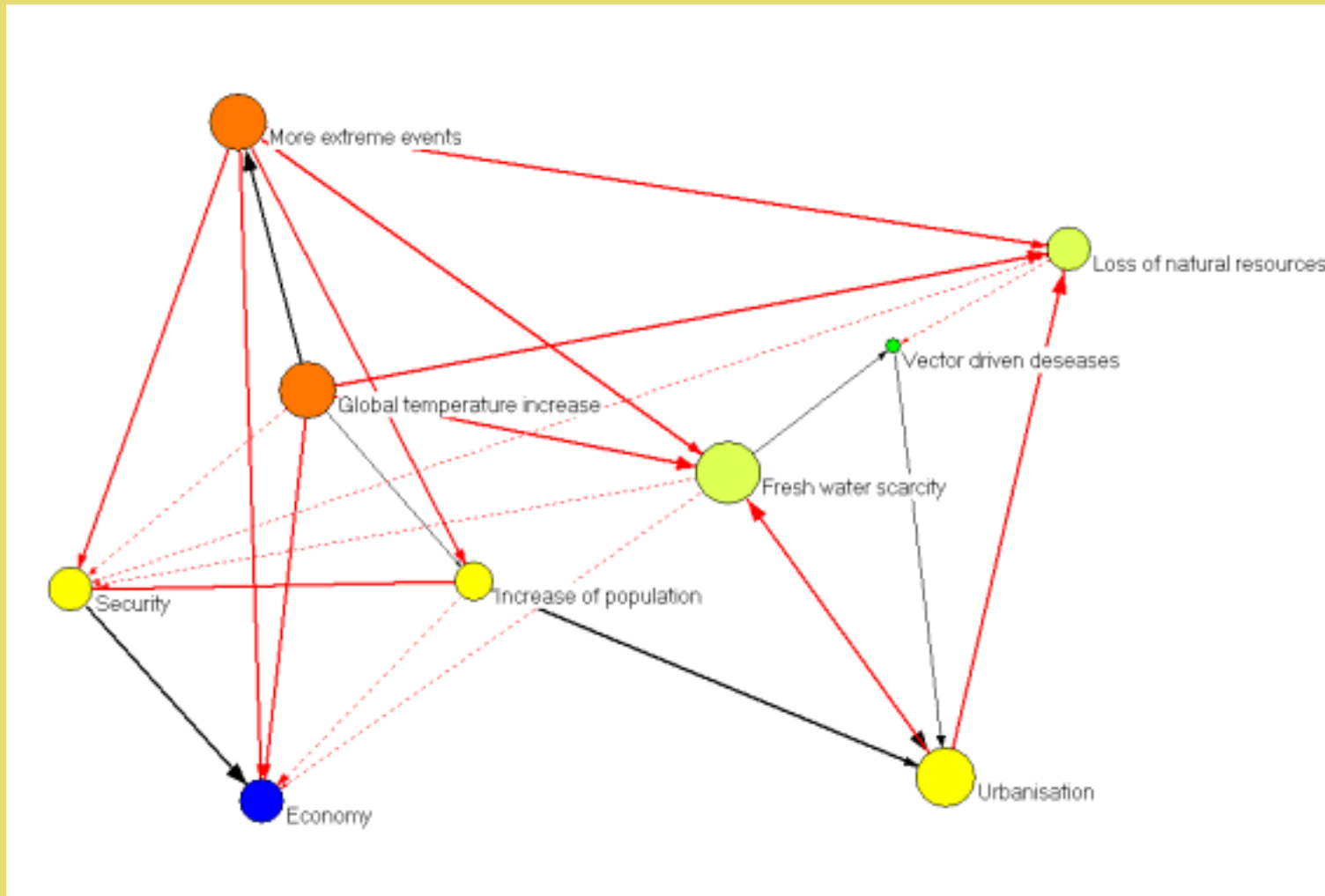


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High Density



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Indegree, outdegree centrality

- **Indegree**: ingoing connections
- **Outdegree**: outgoing connections
- **Centrality**: sum of absolute values of in & out going arrows

is a measure for the importance of nodes, therefore concepts with high centrality-values should get special attention.

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Determining type of factors

- **Transmitter**: positive outdegree but no indegree => drivers or forcing functions
- **Receivers**: indegree but zero outdegree
- **Ordinary** variable

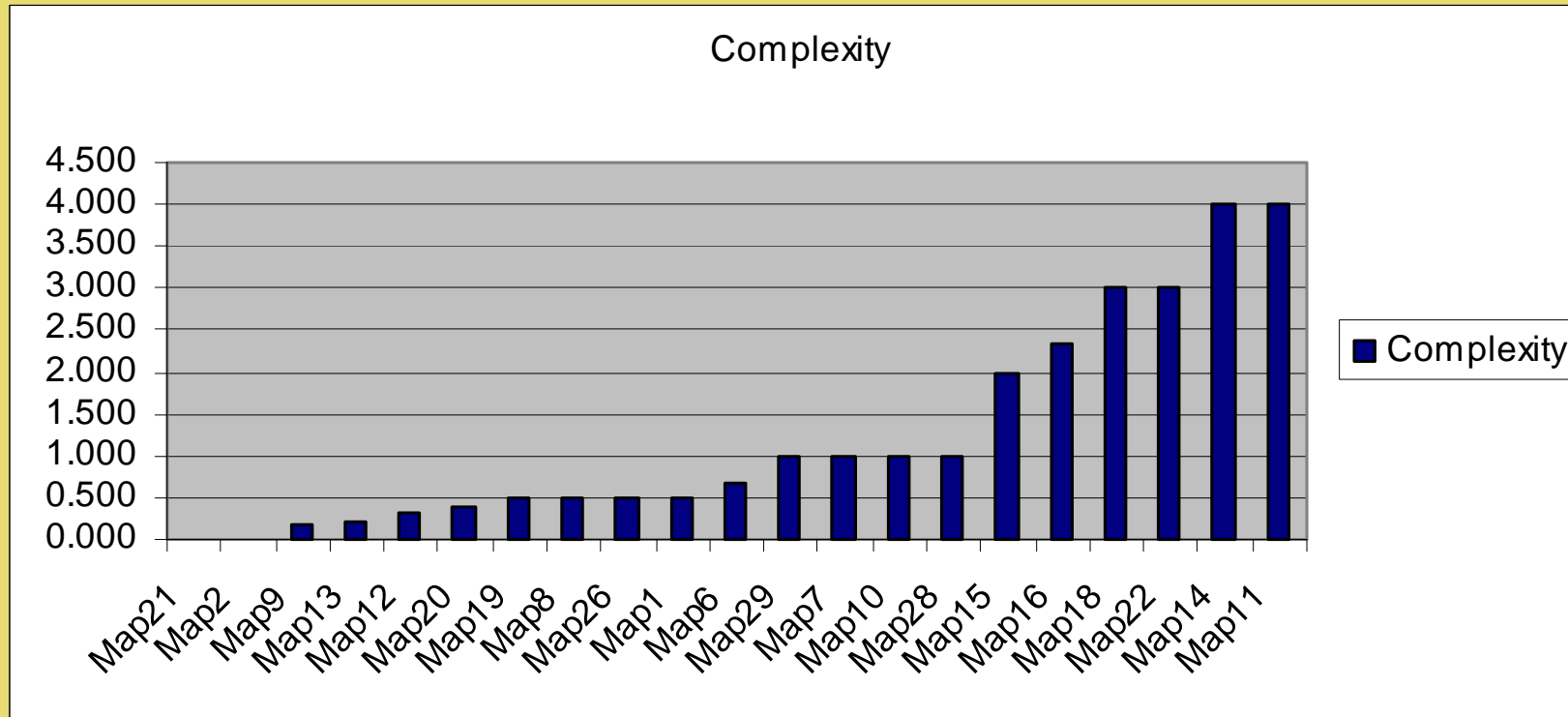
Complexity is the ratio of the number of transmitters to the number of receivers

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Complexity

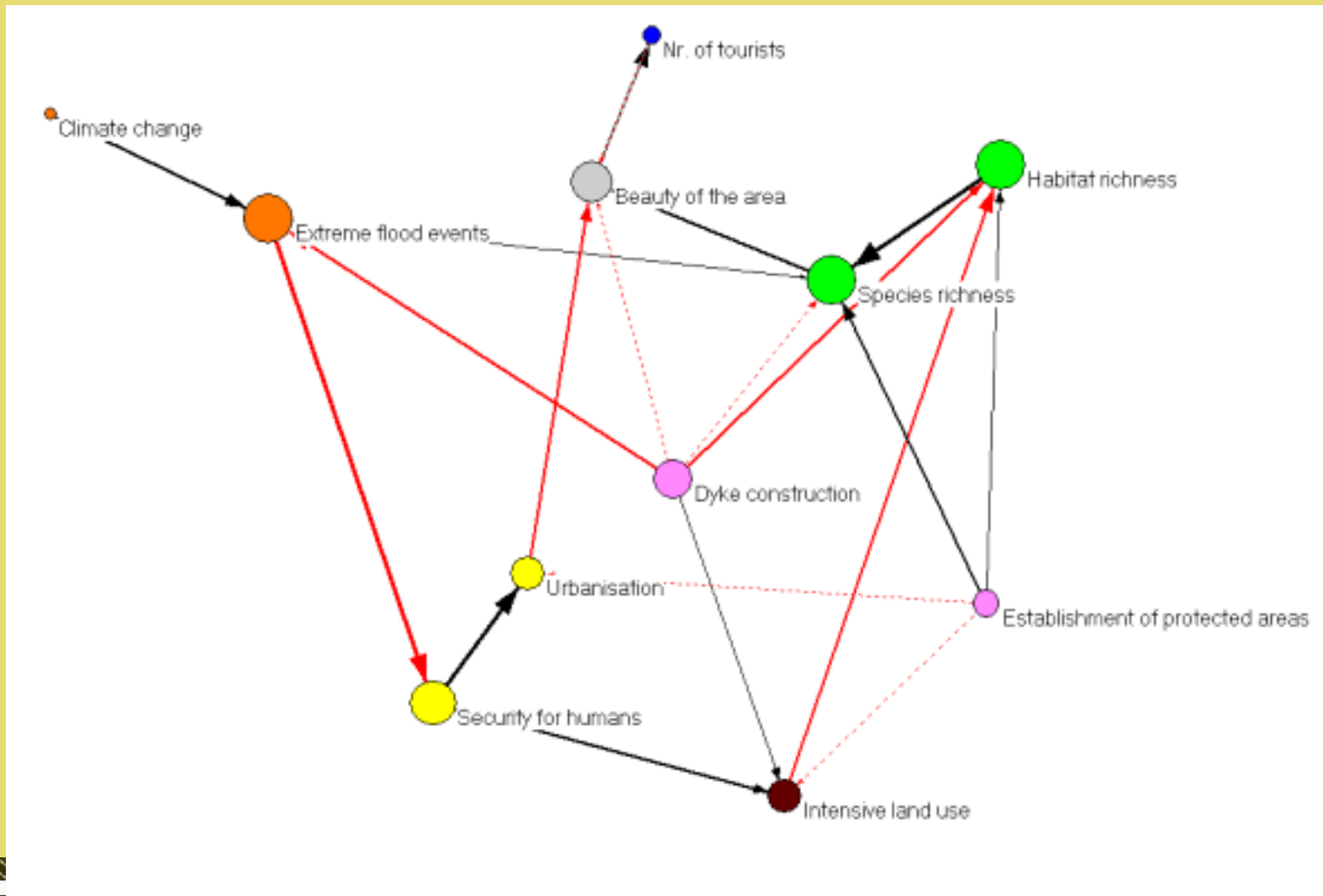


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Low complexity

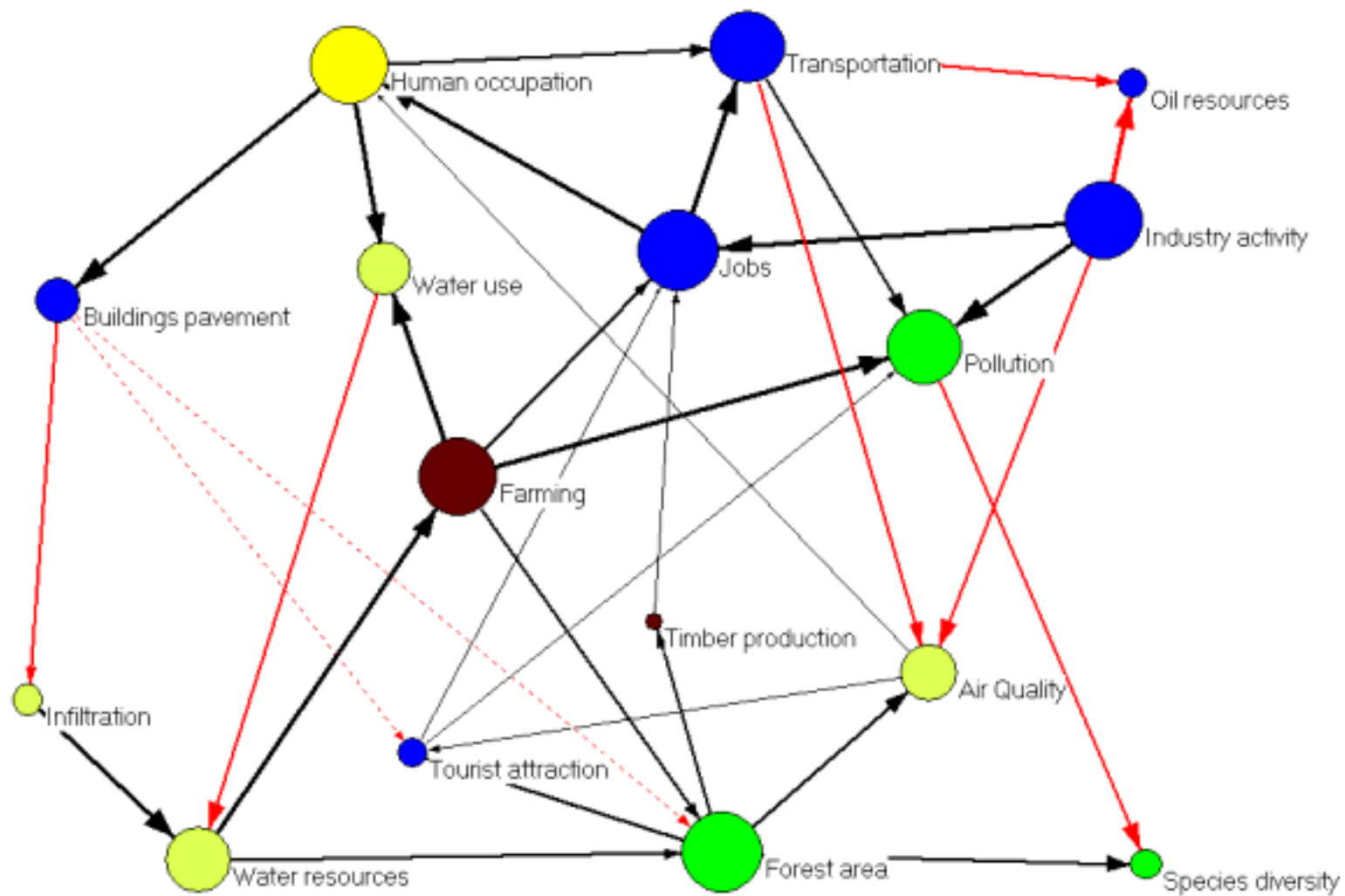


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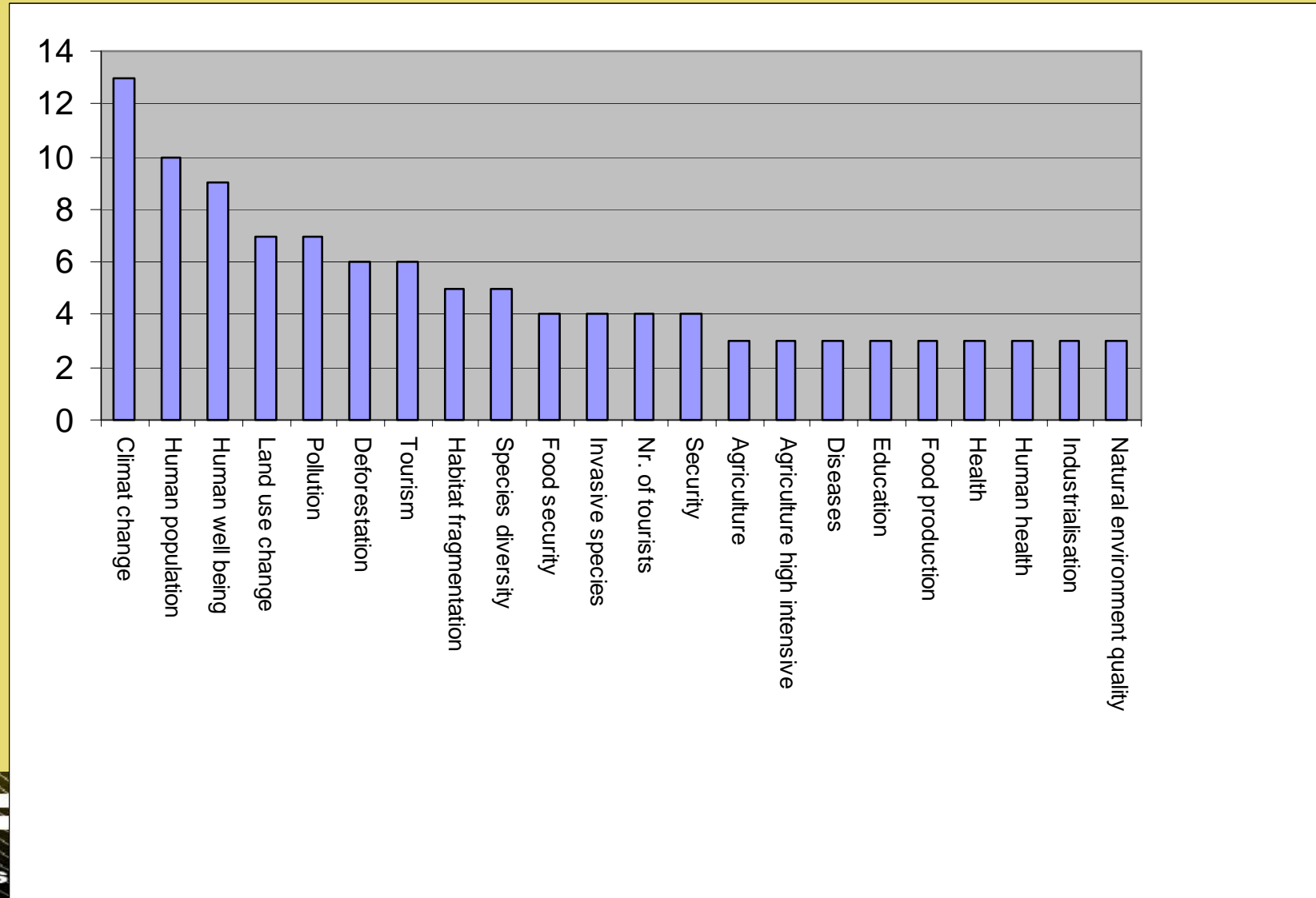
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High complexity



Most mentioned concepts



Some preliminary observations....

- Climate change was either perceived as a driver (3 of 12) or as ordinary variable
- Human well being either driver (1) or receiver
- Land use change was always a ordinary variable
- Species diversity was mostly perceived as an ordinary variable
- Only one map had a concept related to science

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Outlook

- All maps and results will be available either on summer-school web-page or on our web-page – or on both....
- A aggregated map (all maps put together) will be available => possibility to run scenarios
- If you want to make a new map after the summer-school you can send it to me...

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Thank you for
participating!!!

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