**MATILDA DUNN,** PHD CANDIDATE

# HOW DOES THE UNITED NATION SYSTEM WORK TOGETHER ON BIODIVERSITY GOALS?

IMPERIAL COLLEGE LONDON | CENTRE FOR ENVIRONMENTAL POLICY
GRADUATE INSTITUTE GENEVA | CENTRE FOR INTERNATIONAL ENVIRONMENTAL STUDIES

# BACKGROUND
## UN SYSTEM



*The UN HQ in Geneva*

- A **stable** and **functioning** earth system is foundational for achieving UN's 2030 Agenda.
- UN System offers an important forum for **harmonizing** and **catalyzing** action.
- Environmental activities within UN System increased after **Rio Earth Summit (1992**) in response to the **demand** from member states.

i. Folke, C. et al. (2016). *Ecology and Society*, 21(3),
ii. Adams, W.M. (2009) Routledge.

# BACKGROUND
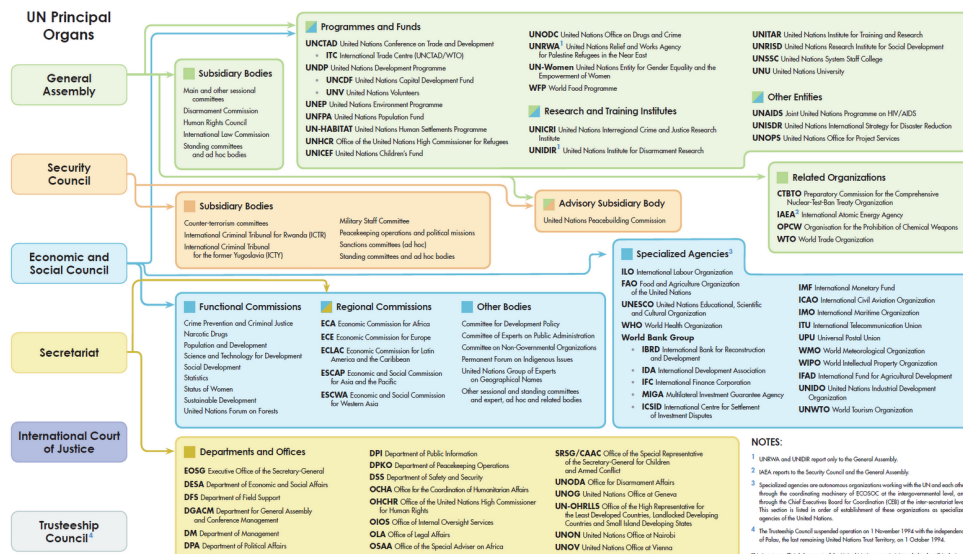
# UN SYSTEM



*The UN systems structure*

- However, entities found to be working in **silos** with **limited collaboration,** resulting in:
  - Disorganization,
  - Inefficiency
  - Fragmentation
- **Mechanisms** to increase collaboration across entities include:
  - SWFS (UN-EMG, 2017)
  - Common Approach (2021)

i. Folke, C. et al. (2016). *Ecology and Society*, 21(3),

ii. Adams, W.M. (2009) Routledge.

# RESEARCH GAP:

1. How effective is the implementation of these system-wide strategies?
2. What are the barriers to coordination and collaboration?

i. Ivanova, M. (2007). International Environmental Agreements: Politics, Law and Economics, 7(4).

ii. Conca, K. (2015). Oxford University Press.

## RESEARCH GAP:

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RESEARCH OBJECTIVES:
1) To map the current UN system-wide interactions on biodiversity.
2) To identify the current structure of system-wide partnerships:
Density  |  Centrality  |  Clustering
3) Compare structures across partnership "types".

i. Ivanova, M. (2007). International Environmental Agreements: Politics, Law and Economics, 7(4).

ii. Conca, K. (2015). Oxford University Press.

# UN SYSTEM COLLABORATION

## SOCIAL NETWORK

- Nodes = UN entities (specialized agencies, offices, programmes)
- Edges = Partnerships (co-authors, coordinated activities, collaborations)
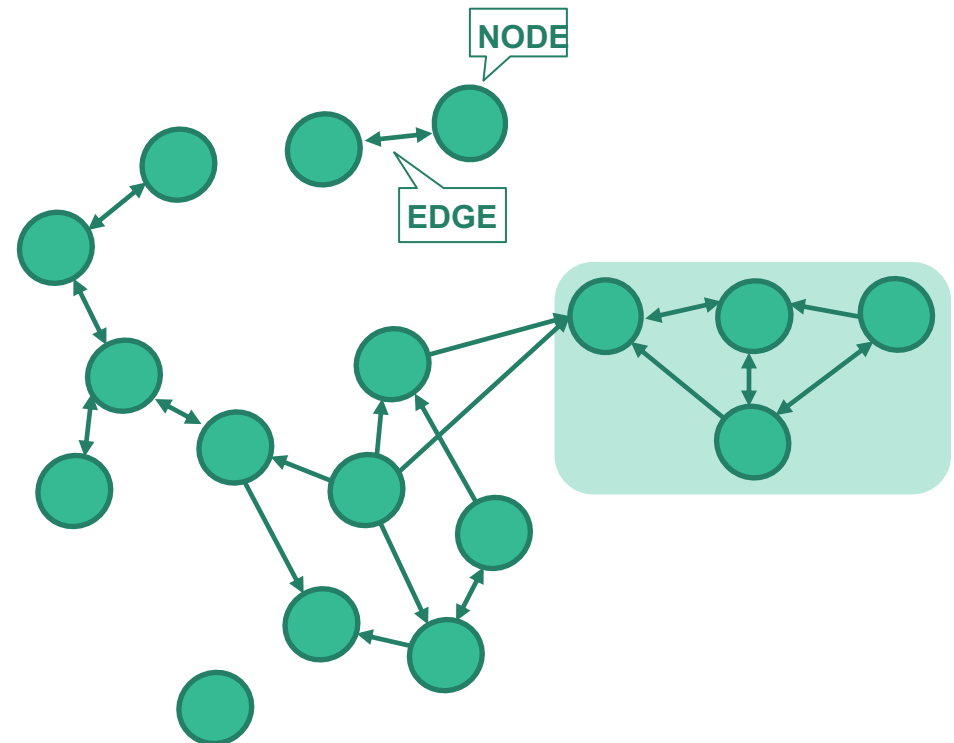
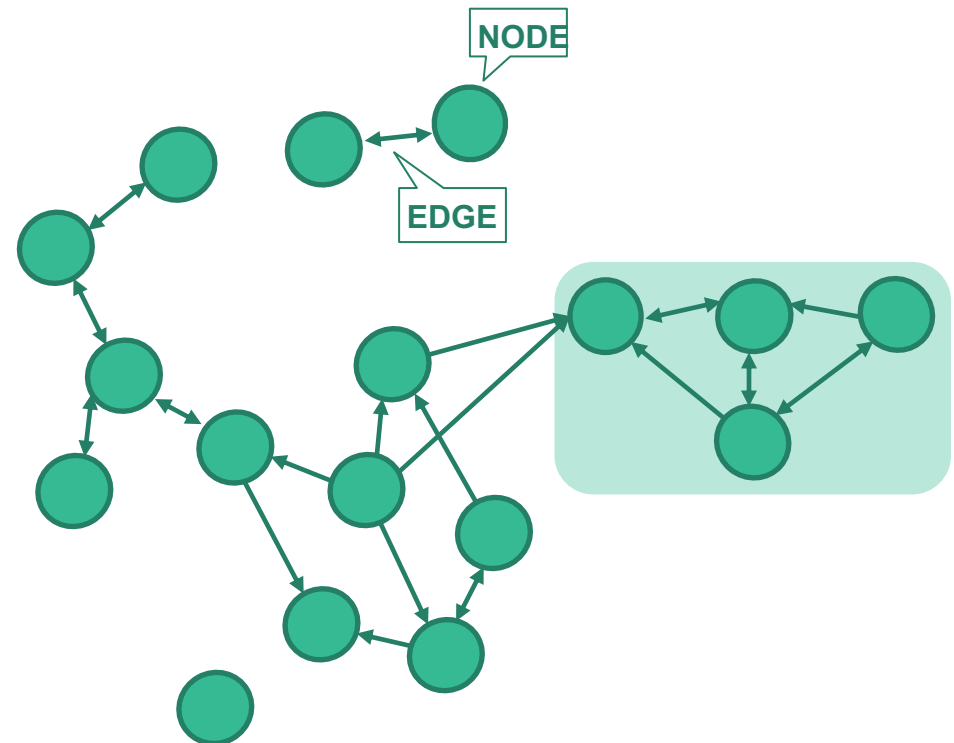# UN SYSTEM COLLABORATION

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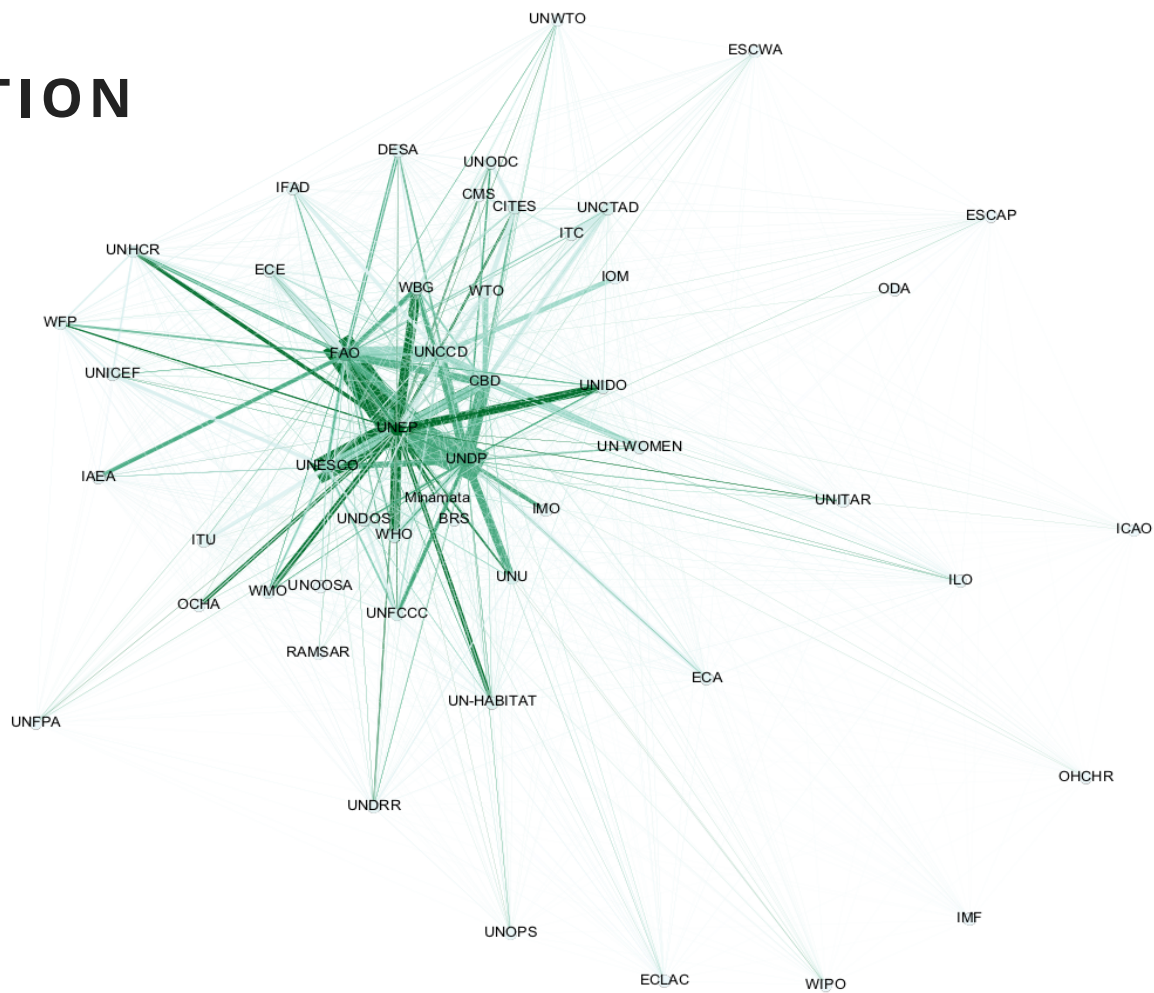- **Data sources**=
  1. UN-EMG survey 2017
     "*Examples of formal partnerships that contribute to the environmental dimensions of the SDGs*"
  2. Systematic search of UN agency reports

# UN SYSTEM COLLABORATION

## SOCIAL NETWORK

### 1. High network density:

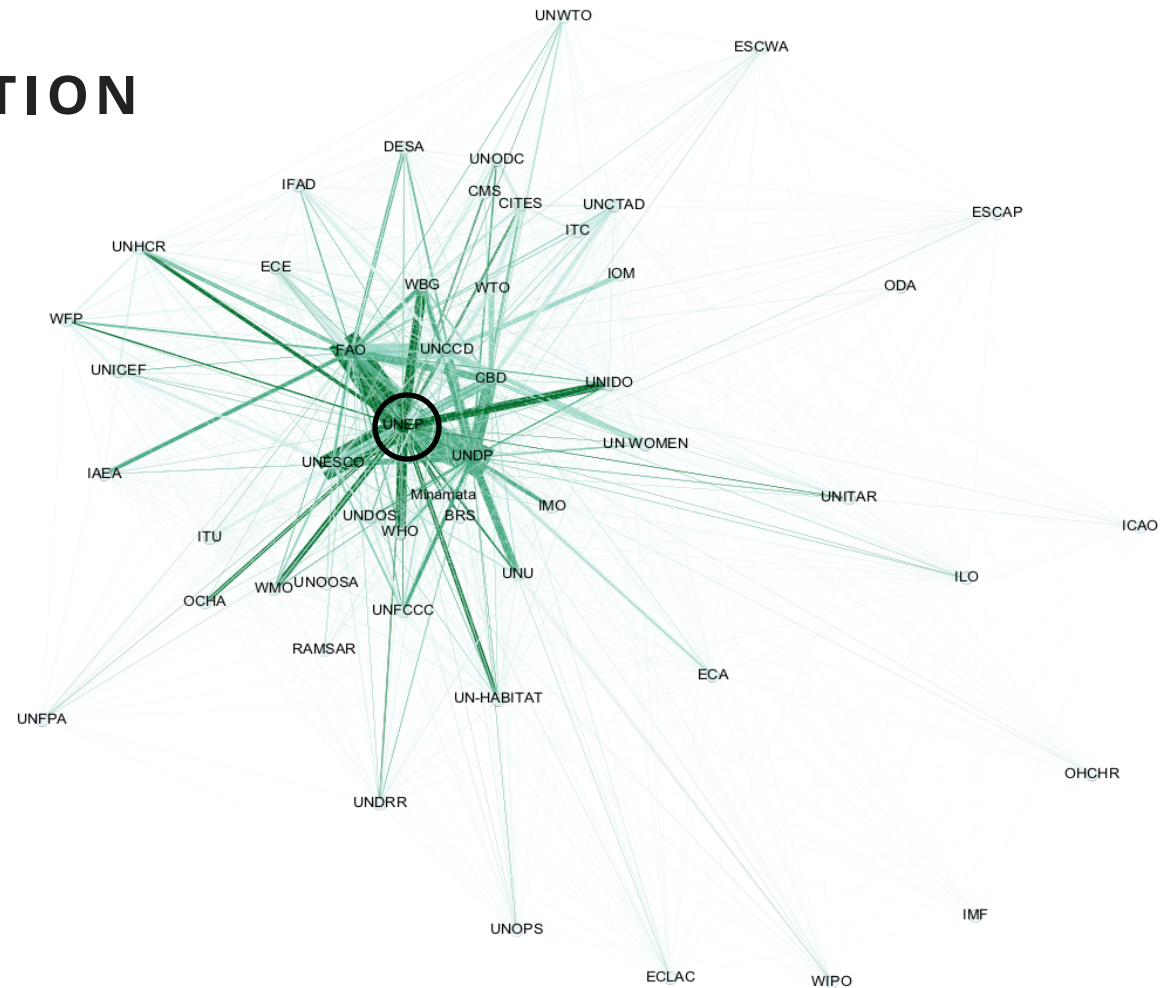*Density=Number of present connections against total possible number*

# UN SYSTEM COLLABORATION
## SOCIAL NETWORK

### 1. High network density:

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### 2. Highly centralized network:

*Centrality=How many direct connections one node has to other nodes in the network*

# UN SYSTEM COLLABORATION
# SOCIAL
# NETWORK

## 1. High network density:

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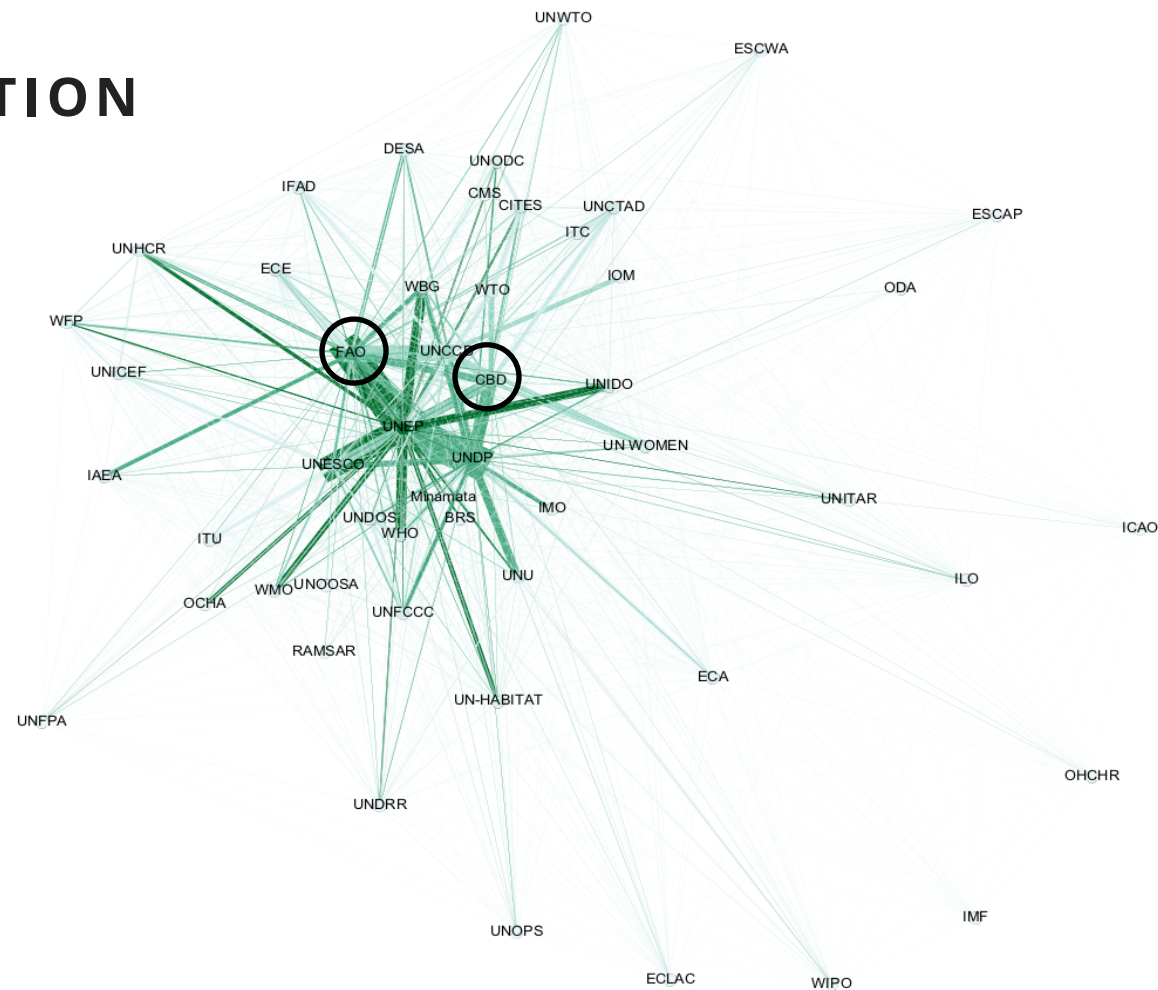
## 2. Highly centralized network:

*Centrality=How many direct connections one node has to other nodes in the network*

## 3. Short paths but high clustering:

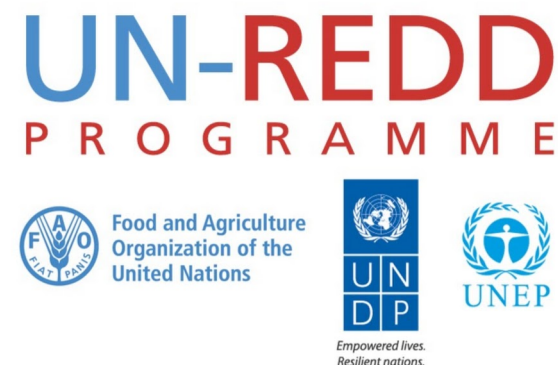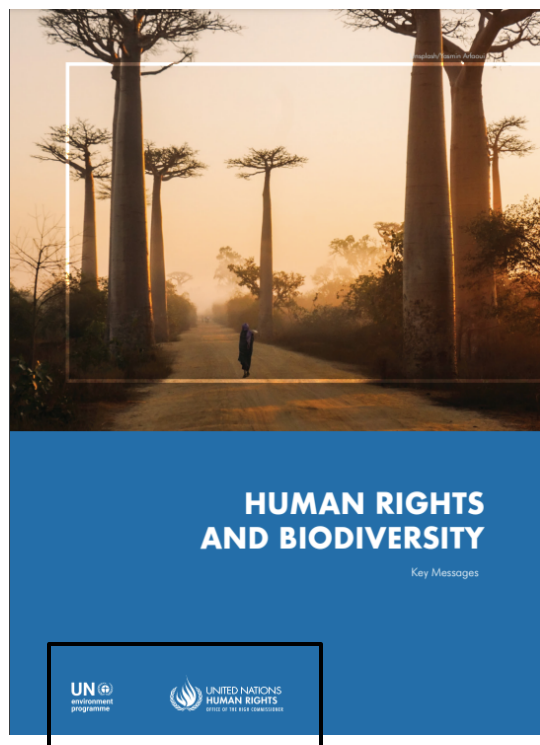*Path length=Number of edges between 2 nodes*

*Clustering=A group of nodes more connected to each other than other nodes*
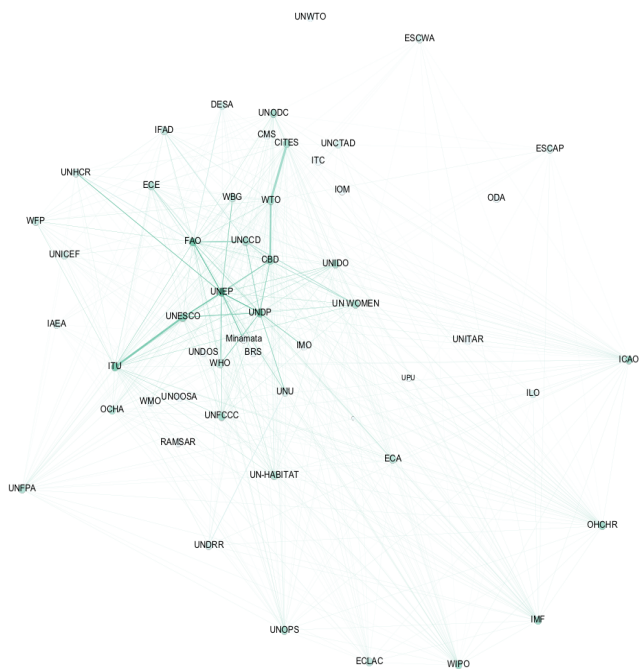
Co-authors: A one-off report co-authored by more than one UN entity.

Co-ordinated activities: A specific unit with multiple members, a core purpose and a concentration of activities. The co-ordination comes from an external body.
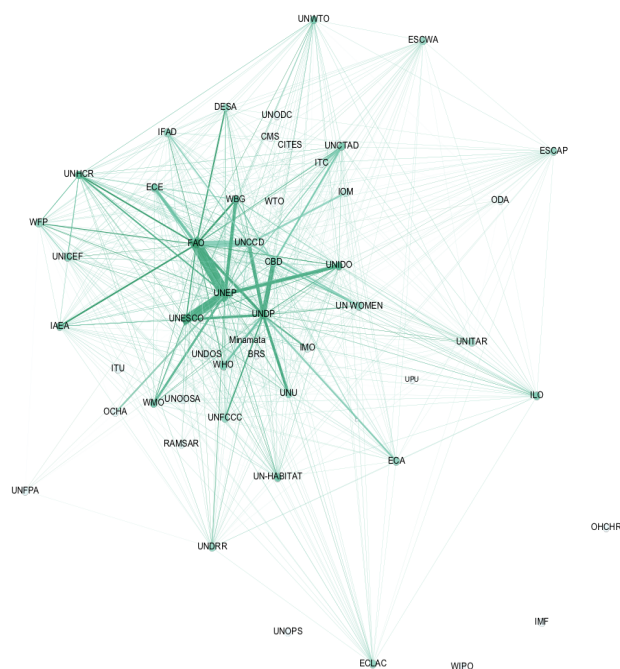
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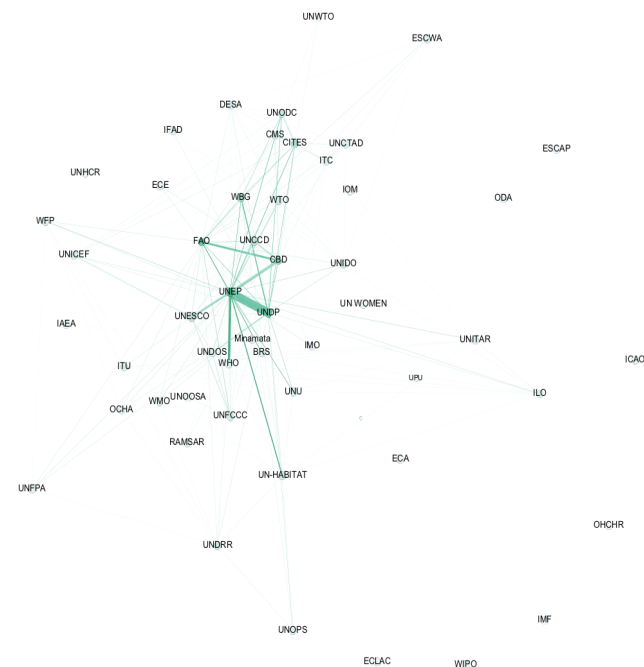


Density: 0.41

Density: 0.91

Density: 0.24

# LIMITATIONS

1. Focus on outputs rather than processes
2. Lack of understanding about what "flows" through the edges
3. What are the barriers and where are they?

i. Bodin, Ö. (2017). Science, 357(6352).

ii. Bodin, Ö., Crona, B., & Ernstson, H. (2006).Ecology and Society, 11(2).

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┌──────────────────────┐
│  Rich picture of UN   │
│  system-wide work on  │
│     biodiversity      │
└──────────────────────┘
           │
           ▼
┌──────────────────────┐
│     Interviews:       │
│ 1-Describe rich picture│
│ 2 - Net mapping on the │        ┌──────────────┐
│      diagram          │        │  Feedback    │
└──────────────────────┘        │   loop 1     │
           │                     └──────────────┘
           ▼
┌──────────────────────┐
│ Congregate participant│
│        maps           │              ┌──────────────┐
└──────────────────────┘              │  Feedback    │
           │                           │   loop 2     │
           ▼                           └──────────────┘
┌──────────────────────┐
│ Consensus building of │
│   model sociogram     │
└──────────────────────┘
```
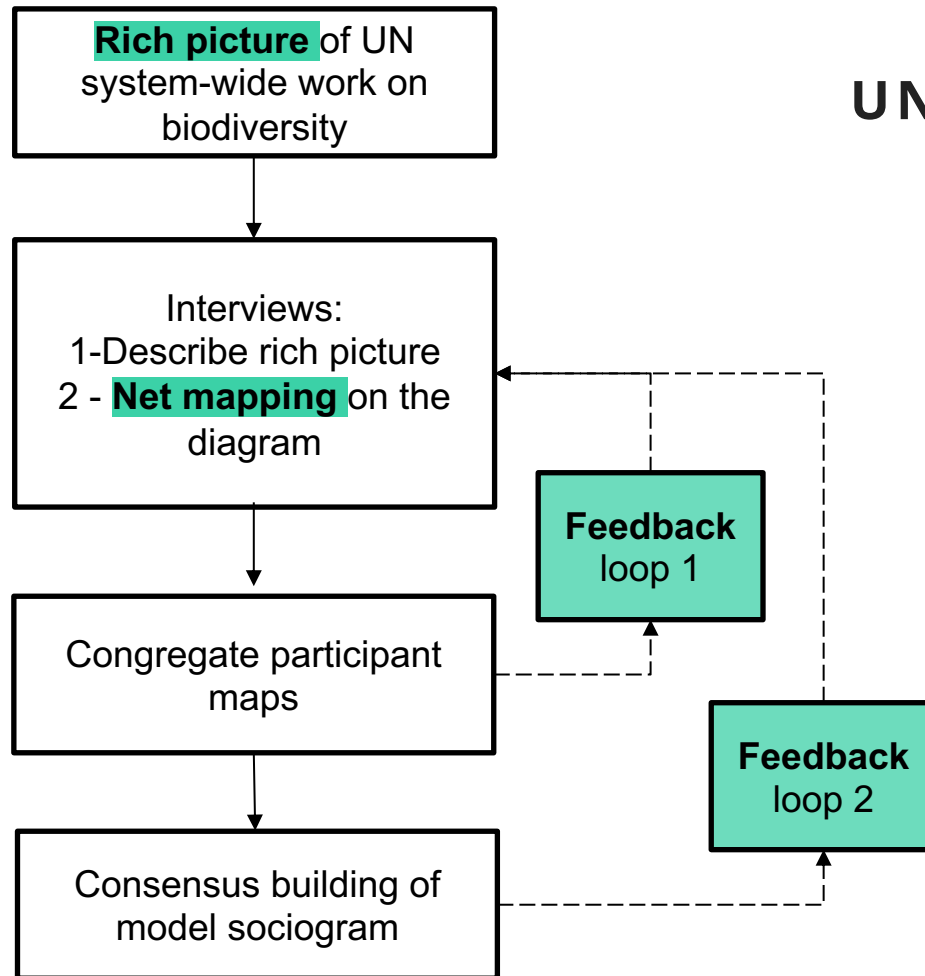
## UN SYSTEM COLLABORATION

# INTERVIEWS

Rich picturing: *Part of Soft Systems Methodology, a way of expressing a situation through diagrams.*

Net mapping: *Creates an influence network map by scoring actors.*

Delphi Method: *A process used to arrive at a group opinion with several feedback rounds.*

# THE HISTORIC
# CONTEXT



*Maurice Strong, Jan Mårtenson cycling to the 1972 UN Conference on the Human Environment*

## 1970s-1980s:

1972: UN Conference on the Human Environment, Stockholm

1987: Our Common Future, Brundtland report

## 1990s

1992: Rio Earth Summit

## 2000s-2020s

2006: Kofi Annan's "Delivering as One" Report

2012: UN SWFS on the Environment (EMG)

2021: Common Approach to Biodiversity and NBS (WCMC)

i. Hanhimäki, J. M. (2015). Oxford University Press.

ii. Adams, W.M. (2009) Routledge.

# BIODIVERSITY INTEGRATION

# CONTENT ANALYSIS

Aim:

Examine the *context* in which biodiversity is integrated into different UN agency strategic plans

Method:

1. Conceptual Analysis
   - Frequency of each term.
2. Relational Analysis
   - Proximity, strength and direction of relationships between terms
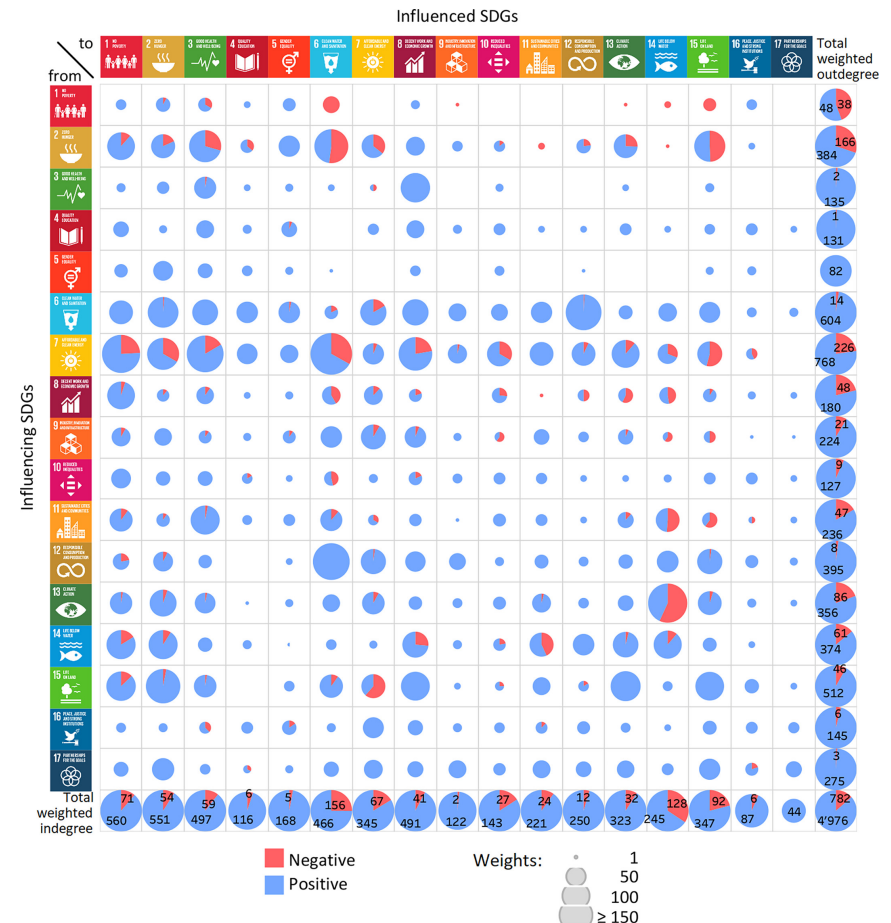


*Pham-Truffert et al. 2020 Sustainable Development* ***28****:5*