

Incorporating Indigenous Environmental Knowledge Into National Policy and Cultural Practices: The Role of Sami Knowledge in Sweden's Sustainability Practices

Katie Campbell

PROJECT

- Prevalence of Indigenous knowledge in sustainable societies:
 - Environmental policy
 - Cultural Practices
- Document analysis
- Qualitative methods for assessing cultural practices
- Resource use, environmental attitude, traditional environmental knowledge
- Purpose: use this information in other areas with Indigenous populations to fight climate change

SUSTAINABILITY

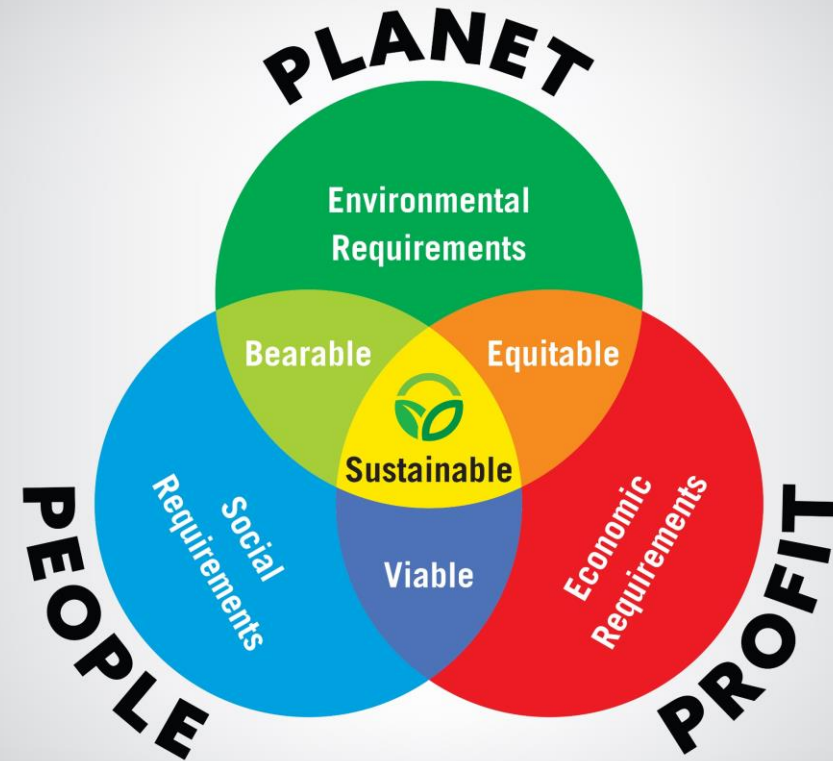
Climate change



Greenhouse gas emissions



Resource extraction



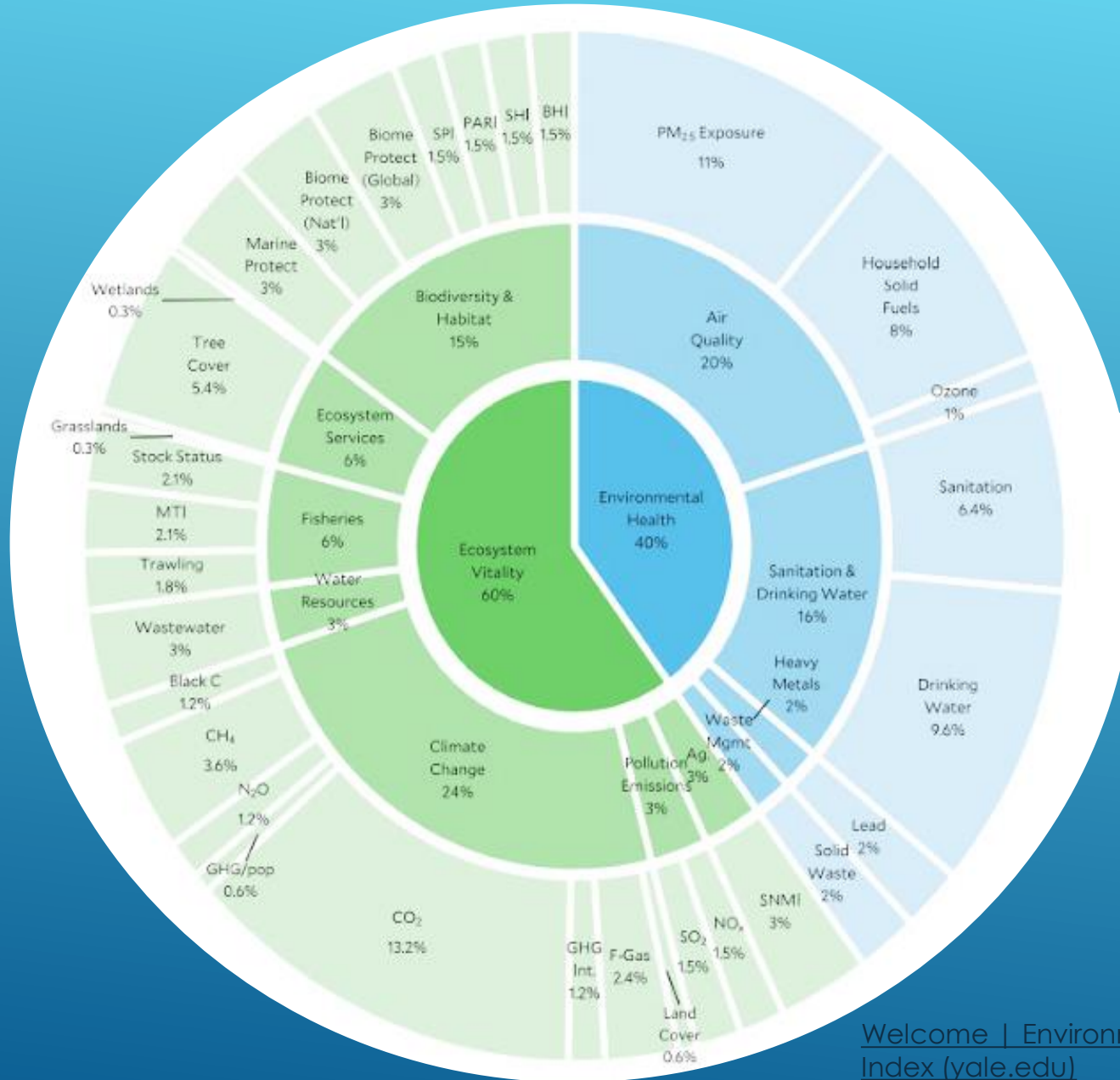
ENVIRONMENTAL PERFORMANCE INDEX

Sweden

Overall: 8th

Climate change: 8th

Ecosystem vitality: 14th



Canada

Overall: 20th

Climate change: 37th

Ecosystem vitality:
38th

CLIMATE POLLUTION PER CAPITA

annual climate pollution per capita in 2017



SWEDEN

8th in EPI ranking

Meeting goals of climate accords

Indigenous Relations

INDIGENOUS KNOWLEDGE

Based on years of accumulated knowledge + natural resource dependency

Holistic approach

Ways of knowing

- inherent to local environment
- different forms = different ways of understanding



Young Sámi in Jokkmokk
(Jokkmokk Sámi market in Swedish Lapland – in pictures | Travel | The Guardian)



Canadian Indigenous Group Oral Tradition (Oral tradition: the word is king – Societies and Territories (learnquebec.ca))



SÁMI

Reindeer Herding

Long history of colonization

Knowledge of local environment

RESEARCH AREA

Jokkmokk

- Population: 2700
- Reindeer-herding hub
- Education centre
- Office of Sami parliament



[Jokkmokk Sami winter market \(Jokkmokk Sámi market in Swedish Lapland – in pictures | Travel | The Guardian\)](#)



Umeå

- Population: 130,000
- Umea University
- Largest locality in Norrland



[Umeå \(Umea, Sweden – Bicycle Touring Pro\)](#)

STAKEHOLDER GROUPS

Citizens

- Environmental attitude
- Presence of Indigenous knowledge/epistemologies
- Sustainability levels

Government Officials

- Environmental goals
- Contents of platforms

Resource companies

- iron ore, hydroelectricity, forest
- Sustainability statements
- Impact assessments



**Hydropower Dam outside
Jokkmokk** ([Jokkmokk
\(odeblom.de\)](http://Jokkmokk.odeblom.de))



Citizens in Umeå ([Umeå shows the way on smart energy use - Smarter Communities Media](#))

QUESTION 1

A) How does the perception of the natural resources they use differ between citizens of a city (Umeå) and a local Indigenous community (Jokkmokk)?

B) Do traditional Sami holistic epistemologies regarding the local environment translate into the environmental attitudes and beliefs of Umeå citizens?

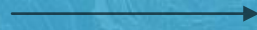
C) What impact do environmental attitudes and beliefs have on their resource consumption rates and overall sustainability?



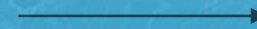
Power station outside Jokkmokk (Photo reportage: [Coping with energy poverty across Europe | by The Beam | TheBeamMagazine | Medium](#))

HYPOTHESIS 1

Indigenous
epistemologies

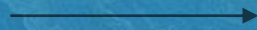


Higher
environmental
attitudes



More
environmentally
responsible
behavior

Umeå



More advanced technologies

Jokkmokk



Conserving resources



QUESTION 2

A) What is the rate of congruence between the three stakeholder groups on waging environmental impact vs. economic benefit regarding resource extraction?

B) Do citizens feel represented by resource extraction companies and government officials?

A decorative graphic consisting of several parallel white lines of varying lengths, slanted diagonally from the bottom right towards the top right, set against the blue background.

HYPOTHESIS 2

Umeå → Economic Benefit

Jokkmokk → Environmental impact

- Citizens will have more disconnect with resource extraction companies and government officials: political distrust will prevent policy success
- Lack of representation specifically in Indigenous populations

DESIGN



- Citizens

1. Questionnaires

2. In-depth Interviews

3. Participant Observation

- Resource extraction companies + Government Officials

1. In-depth interviews

2. Participant Observation

[A human and a reindeer in Jokkmokk \(About us - Jokkmokk Arctic Dream\)](#)

METHODS



[Jokkmokk](#)([Jokkmokk Winter market](#) | [Inlandsbanan](#))

Defining sustainability: greenhouse gas emissions + preservation of natural resources

Relationships between 3 stakeholder groups

Assessing Indigenous-based thought processes in non-Indigenous citizens

Field notes to show surveyor's inherent biases and thought processes/change in perceptions

SIGNIFICANCE

Climate change



[Greta Thunberg at a School Strike for Climate Action \('I want snow for Christmas:' Students demand climate action \(yahoo.com\)\)](#)

Improving Indigenous relations



[Sami Parliament \(Norwegian Sami Parliament Uses Millions and PR Agency to Fight Mining \(highnorthnews.com\)\)](#)

Contributing to data bases