
**HOW TO
CHANGE
THE WORLD**

INNOVATING TOWARD SUSTAINABILITY

Teachers

Minna Halme

Marleen Wierenga

Visitors

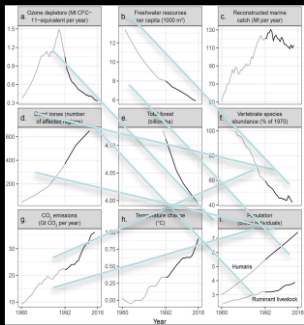
4 entrepreneurs

Dr. Asta Raami

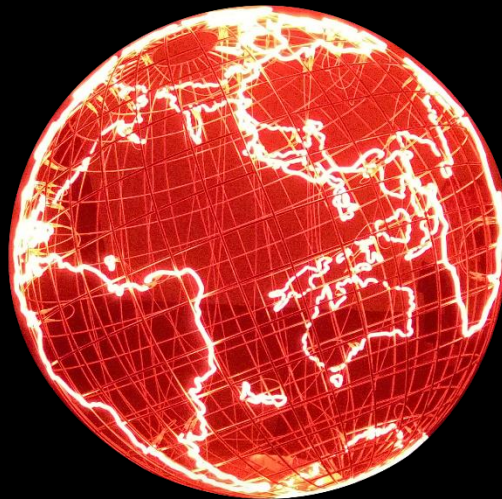


From challenges toward solutions

Complex challenges



Systemic solutions



Innovations



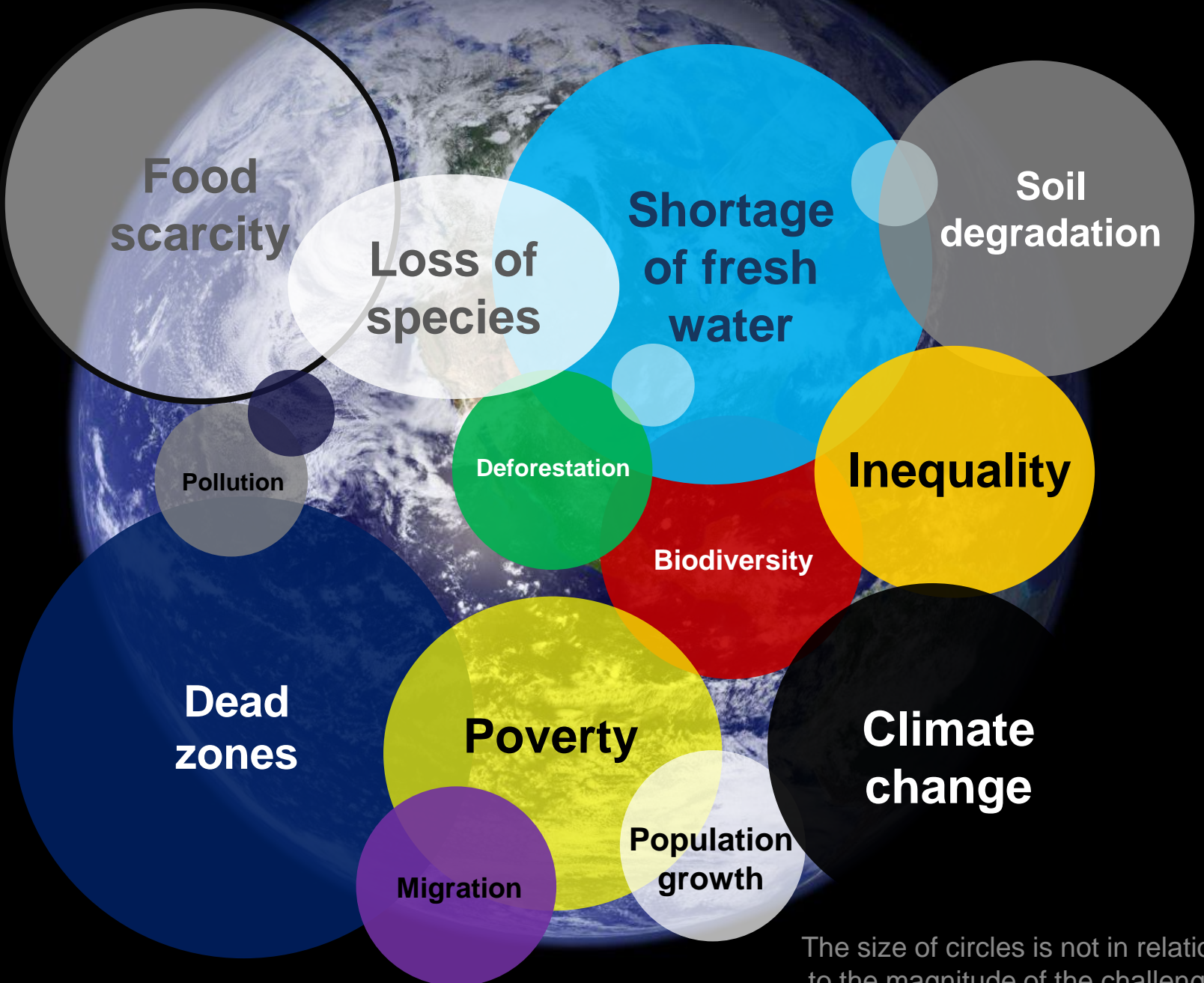
Collaboration



Jan 10, 2019

The earth image: Mona Hatoum, Hot Spot

Sustainability Challenges



The size of circles is not in relation to the magnitude of the challenge

Grand challenges

- Massive social and environmental issues that transcend national borders and have negative effects on large numbers of people and the planet as a whole (George et al., 2016; Whiteman et al., 2013).
- **Complex**, involve many interactions and associations, emergent understandings, and **nonlinear** dynamics
- Pose **radical uncertainty**, actors cannot define the possible future states of the world, and cannot forecast the consequences of their actions
- Cut across jurisdictional boundaries, implicate multiple criteria of worth, and reveal new concerns even as they are being tackled (Ferraro et al. 2015)



Problem types (Horst Rittel 1973)



- Grand challenges fall into the category of wicked problems

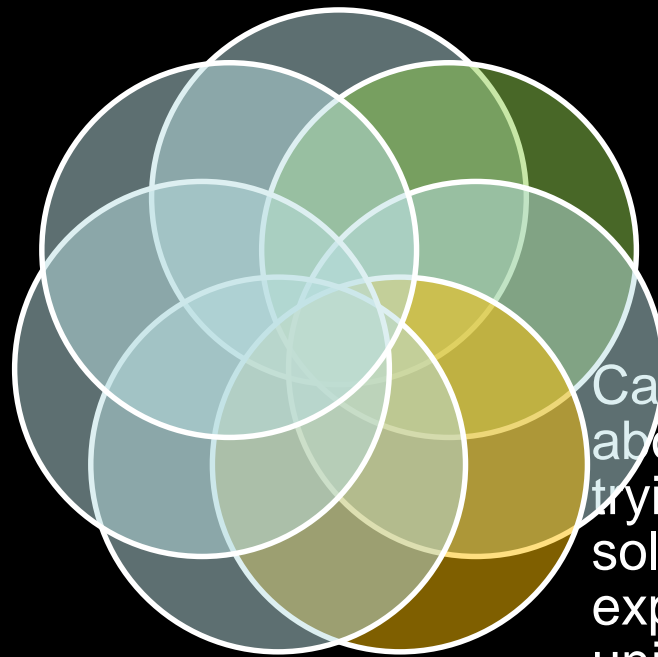
Wicked problems

The interconnected nature of wicked problems

Solutions not true-or-false, but better or worse

Incomplete or contradictory knowledge

Every solution to a wicked problem is a "one-shot operation"; because there is no opportunity to learn by trial-and-error, every attempt counts significantly

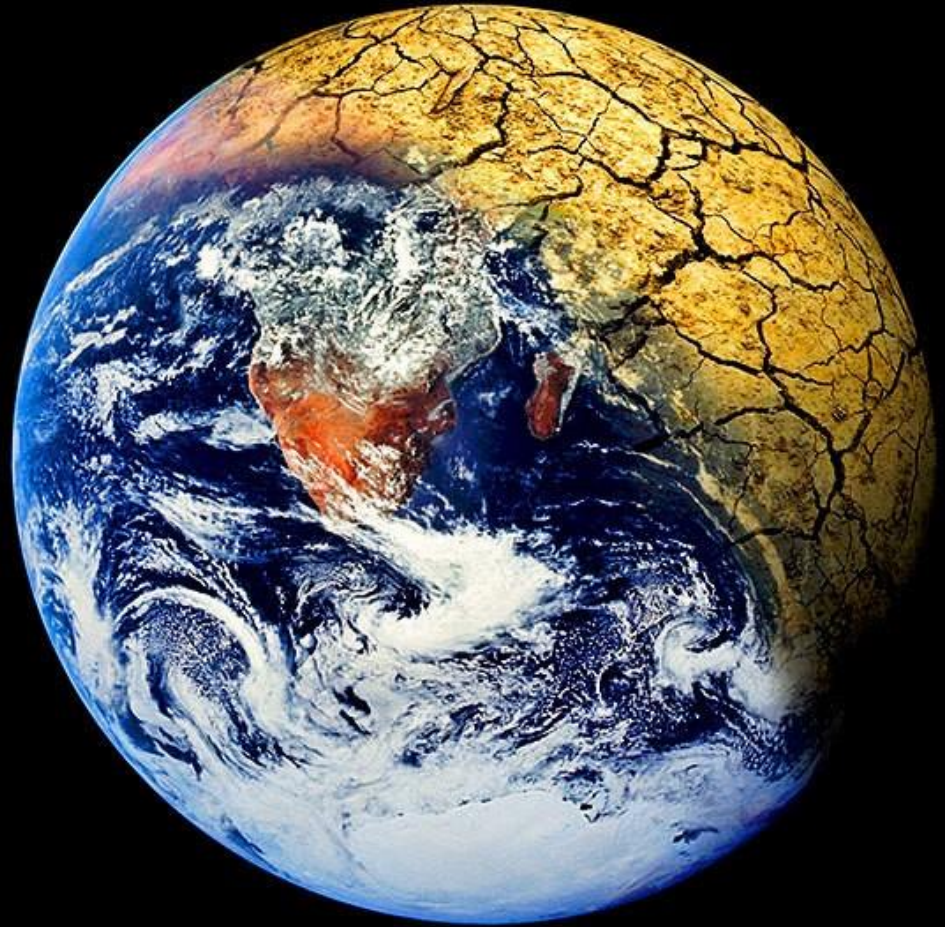


The number of people and worldviews involved

Catch 22: you can't learn about the problem without trying solutions, but every solution you try is expensive and has lasting unintended consequences which may spawn new wicked problems

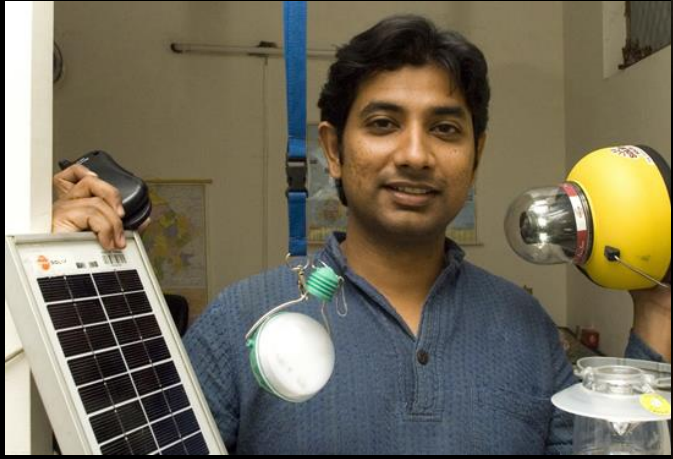
Working with wicked problems

- Accepting the wicked nature of the problem
- Studying and experimenting - simultaneously
- Iterating
- Being responsible and respectful



We must simply act, fully knowing our ignorance of consequences.

~ Kenneth Arrow ~



Never doubt that a small group of thoughtful,
committed citizens can change the world.
Indeed, it is the only thing that ever has.

~ Margaret Mead ~

We aim at

Collaborative
problem initiated
way of doing

Experiential
learning

Transformative
learning

Collaborative
learning

Respecting
others

You can apply the lessons learnt in other
challenge-based courses



The contract

Cocktail party

Let's crowdsource



Contents

Interactive lectures

Exercises

Reading corner

Team project

Learning diary

Grading 0-5

Schedule

https://mycourses.aalto.fi/pluginfile.php/872240/mod_resource/content/8/21E10000%20How%20to%20change%20the%20world_syllabus.pdf





Case

Fairphone

Exercise

H&M

Films

Frightened

The Chocolate Case

Student Team Project

- Team designs a **business model** for a **sustainability enterprise** that aims to address one of the **wicked sustainability problems**.

Steps:

1. **Narrowing down the wicked sustainability problem** chosen by the team: what will be the sustainability contribution of our enterprise? What problem will it solve?
2. Selecting the **geographic context**: where will our enterprise operate?
3. Drafting the **business model** using Osterwalder Canvas or its modified version
4. **Sustainability screening** of the business model
5. Analysis of **challenges and pitfalls** of the enterprise and its business model
6. What can be done **to remove challenges** and pitfalls?
7. Can **Aalto students** set up this enterprise or participate in setting it up?

Use of background information

Relevance & credibility of the model

Quality of sustainability screening

Reading Corner

Choose one of the following books by January 14th:

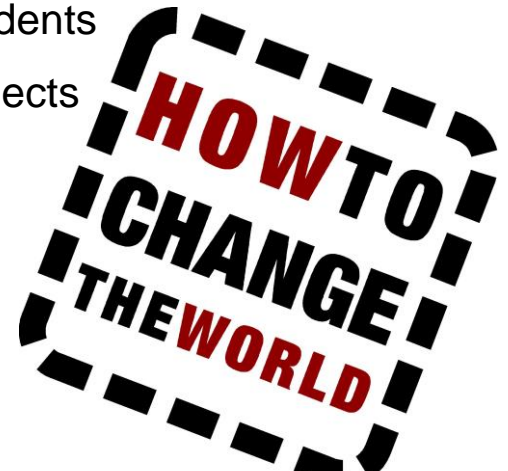
- The value of everything. Making and taking in the global world by Mariana Mazzucato
- The Power of Unreasonable People: How Social Entrepreneurs Create Markets That Change the World by John Elkington & Pamela Hartigan
- The spirit level by Richard Wilkinson and Kate Pickett
- Prosperity without growth by Tim Jackson
- Originals. How non-conformists move the world by Adam Grant
- Happiness: Lessons from the new science. By Layard, R. (2005 or 2011)
- Measuring Happiness – the economics of well-being by Knabe et al.
- Systems Thinking For Social Change by David Peter Stroh

Sign up for one book - you need not come to both Corners

Student team project

Feb ? Clinic for midway problems: Student groups can ask for advice in their team project. Voluntary; time to be determined together with the students

Feb week 7 Change makers proudly present I & II: Student projects



Learning diary

1. “What makes me happy?” Happiness is one of the underlying themes of the course as we explore the connections between ecological footprints, happiness, and the economy. One of them is a diary in which we would like you reflect on a daily basis, what makes you happy.
2. Sustainability deeds - The idea here is to change one small thing in a day, however small it is. This exercise is a concrete part of the learning diary and with the help of that we explore the influence of and learnings from small deeds.

Return by March 3, 2019 in MyCourses



Grading Scheme

Interactive lectures 35%
**Team project: Business model
for a sustainability enterprise 30%**
Reading corner 15%
Learning diary 20%



**Readings
for sessions:
articles in syllabus**

21E10000 - How to change the world: Innovating toward sustainability, 07.01.2019-14.02.2019

Participants

Grades

- » Course home page
- » Materials
- » Team assignment
- » Assignments
- » For Aalto users

Dashboard

Site home

A?

21E10000 - How to change the world: Innovating toward sustainability, 07.01.2019-14.02.2019

Dashboard / My own courses / 21e10000 - ho...

Course home page

- [Announcements](#)
- [General discussion](#)
- [Course syllabus](#)
PDF document

[Materials](#) ▶

Choices | Forums | Resources

Turn editing on | Syllabus | Edit

COMPLETION PROGRESS

There are no activities or resources with activity completion set or no activities or resources have been selected. Set activity completion on activities and resources then configure this block.

LATEST ANNOUNCEMENTS

[Add a new topic...](#)
(No announcements have been posted yet.)

UPCOMING EVENTS

- L01 Lecture, C-350, Päärakennus, Runeberginkatu 14-16**
Monday, 7 January, 13:15 - 16:00
- L01 Lecture, C-350, Päärakennus, Runeberginkatu 14-16**
Thursday, 10 January, 09:15 - 12:00
- L01 Lecture, C-350,**

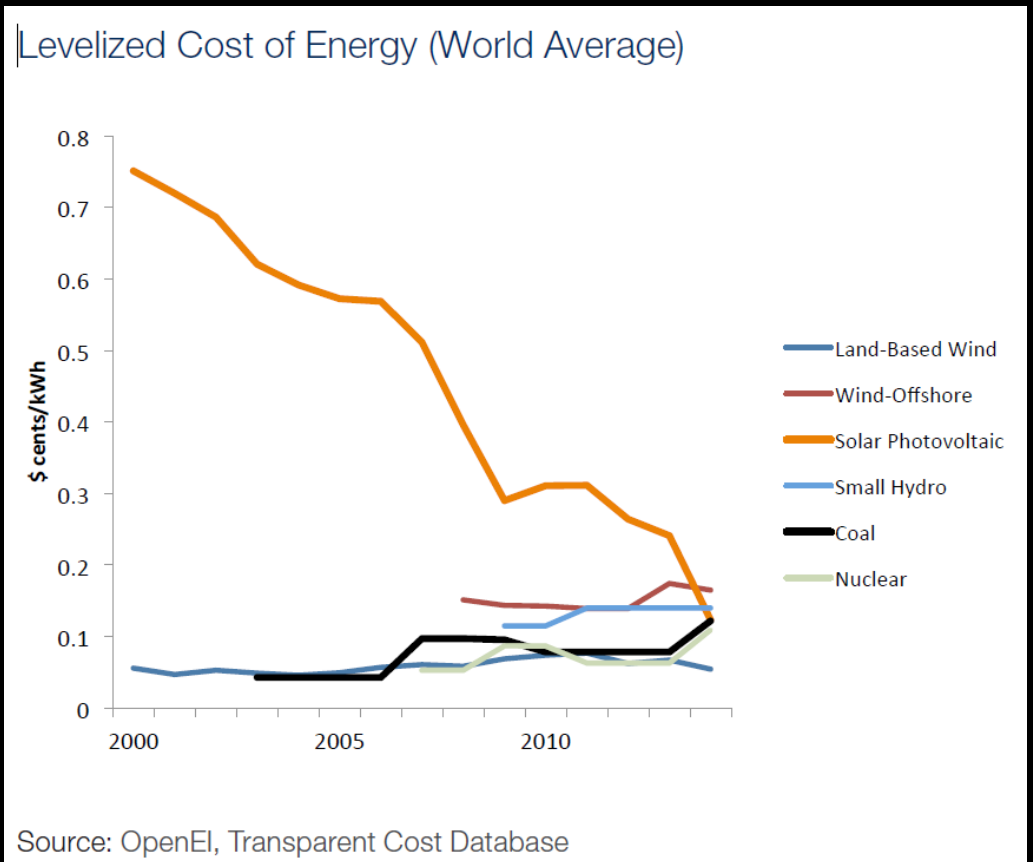


MyCourses is the main tool for communication

- **General discussion** for comments or questions
- **Materials:** readings, cases and lecture slides
- Return your **assignments**
- **Groups** for clinics sessions and student team project
- Select a book for the **Reading corner**

Work with wicked problems

Celebrate small wins



GOOD NEWS OF THE DAY

First they ignore you,
then they ridicule you,
then they fight you,
then you win.

~ Mahatma Gandhi ~