

Climate Communication – What is it, and what works?

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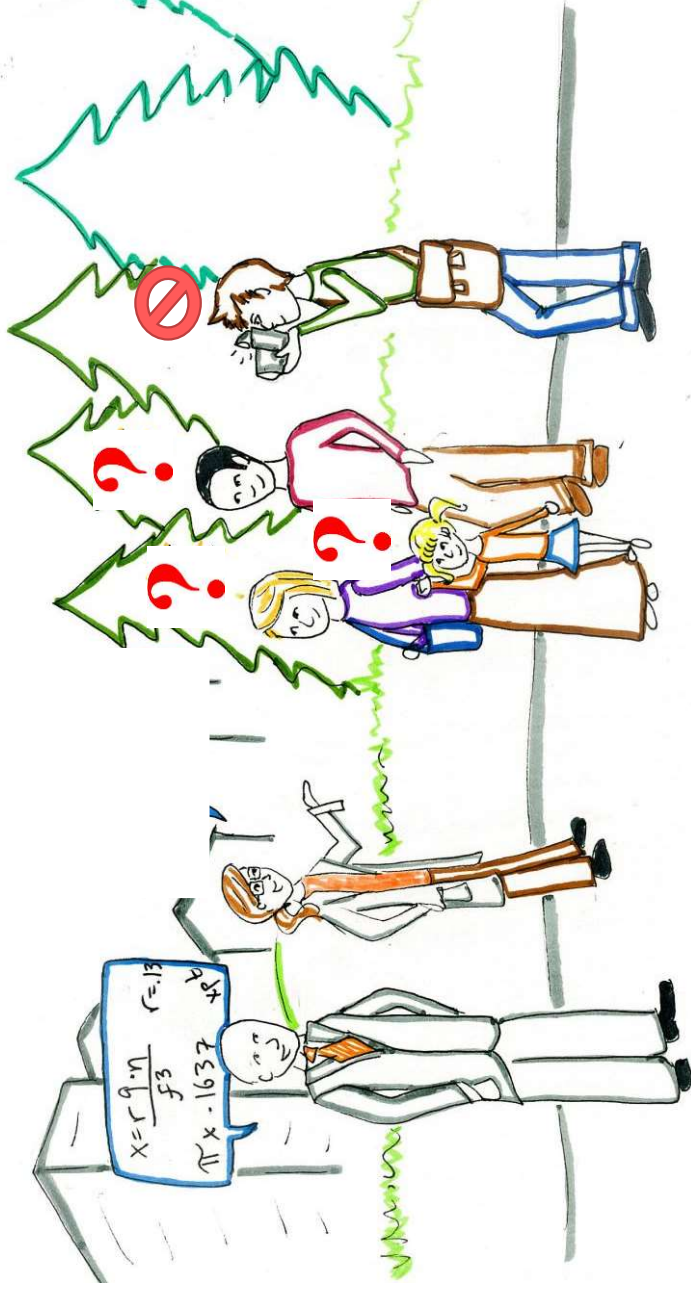
- SEI is an international nonprofit research organization that has worked with environment and development issues from local to global policy levels since 1989
- SEI has the mandate to bridge science and policy to find robust responses to the challenges of sustainability
- SEI has 240 scientific staff at 9 different offices and centers

Areas of expertise

- Research and capacity building for low-emission and sustainable development under the Paris Agreement and the SDG
- Supporting policy makers, NGOs and companies including UNDP, EU, WWF and Holmen Skog
- Supporting the IPCC in research and communication
- Hosting UNESCO's Framework Program for Sustainable Lifestyles
- Mistra-SWECIA project about climate change adaptation and the Swedish forest sector
- Recognized as one of the top three environmental policy think tanks in the world by Philadelphia University Think Tank Project

The problem

How do we engage people about climat change?



What is climate communication?

- Climate communication are efforts to use **scientific information** and **knowledge** to **engage** a **target audience** with the issue of **climate mitigation** and/or **adaptation**
- Engagement can lead to **cognitive, behavioural** and **collective change**
- Like other hotely discussed issues, **what** is being communicated, **by whom**, how its content is **perceived** and what it can **achieve** is impacted by **norms, values** and **socio-economic conditions**

Information deficit syndrome

- There is a general assumption that people will act on climate if they know more about it
- However, research has shown that disseminating of information is a necessary, but insufficient step to changing people's minds and actions
- In the age of **fake news**, what is scientifically established knowledge is increasingly called into question

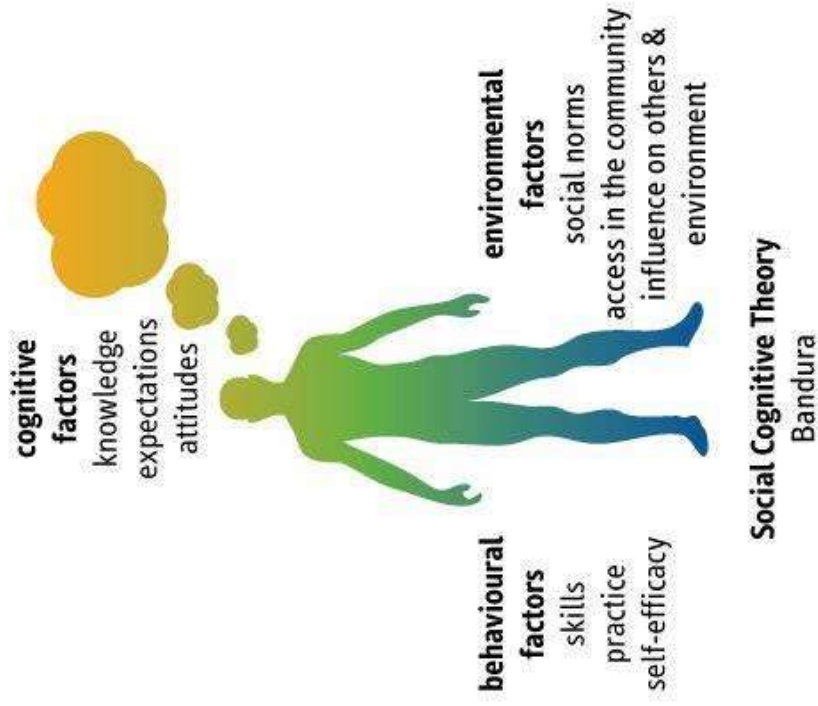
Awareness action gap

- Awareness about e.g. climate change and even approval for political action is **high**
- But only few change their habits
- People are not making rational decisions, instead they have **bounded rationality**
- They use imperfect **heuristics** to understand the world
- Most of our behaviour is learned through **observing and mimicking others**
- And most of the time, we make unconscious, automatic decisions

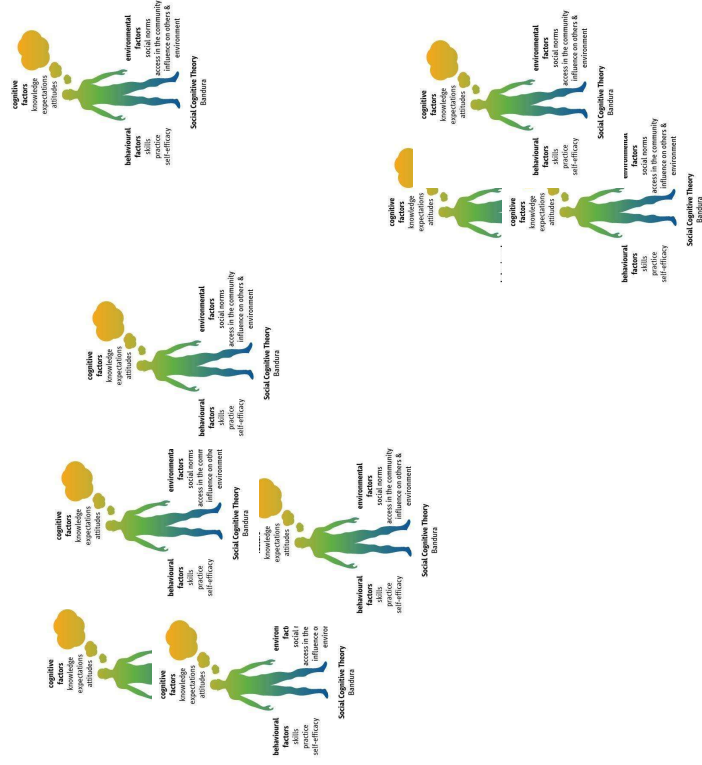
	Total 'A very serious problem' (7-10) 2015-2013	Total 'A fairly serious problem' (5-6) 2015-2013	Total 'Not a serious problem' (1-4) 2015-2013	Don't know 2015-2013	Average 2015-2013
EU28	69	22	8	1	7.3
RO	74	19	4	3	7.9
BG	80	13	5	3	8.2
UK	53	30	15	2	6.5
FI	65	26	9	0	7.0
IE	59	29	10	2	6.8
DK	64	27	9	0	7.0
FR	69	25	6	0	7.3
CY	76	17	6	1	7.8
EL	87	10	3	0	8.2
EE	34	36	25	5	5.7
NL	58	31	10	1	6.6
LU	69	21	9	1	7.3
LT	62	25	12	1	7.0
BE	68	24	7	1	7.2
SE	71	22	6	1	7.3
PT	78	17	4	1	7.8

Individual vs collective change

Individual change



Collective change



Objectives with communication

1. **PERSONAL:** Raising awareness among forest owners about climate change risks
2. **BEHAVIOUR:** Promoting the uptake of measures to adapt forest to changing climatic conditions
3. **SOCIETY/COMMUNITY:** Changing forestry management practices and strategies

Activity One

Describe your latest effort to inform the public about issues in your biosphere reserve.

What was the target group?

What was the objective?

Public perception matters

- Like when you have an argument with a friend or family member, don't expect that what you are saying is perceived the way you think it should
- But how information is perceived matters very much if your aim is to raise awareness, change behavior and influence policies
- Public perception of science is influenced by: cognitive biases, values, culture, and, increasingly, political discourse

20 COGNITIVE BIASES THAT SCREW UP YOUR DECISIONS

Microfilm Editions

Expected vs actual risks



Values, so many values....



Original created available from subjects: [lib.royal.gov.uk/subjects/6/11/2006/2016/individuals](http://lib.royal.gov.uk/subjects/6/11/2006/2016/individuals/lib.royal.gov.uk/subjects/6/11/2006/2016/individuals). Last updated: 2016-04-20.

Polarization



Activity two

What misperceptions about climate change have you encountered?

Which values, do you think, have those in common that come to your public workshops? And who is missing?

Have you experienced polarization?

Does climate communication work?

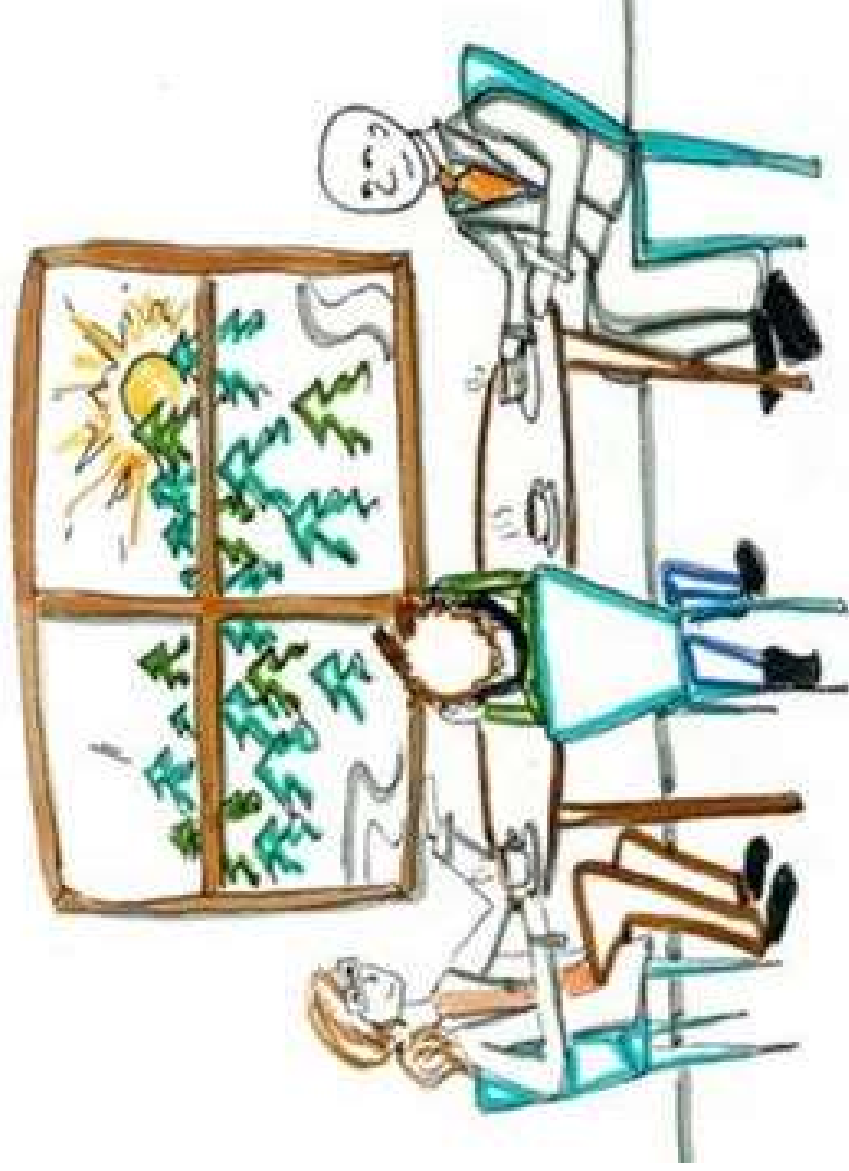
- That depends on what our objective is. Do we want to raise awareness, change individual behavior or trigger policy change?
- Science only provides some insights, but that may change soon due to innovative ways of machine learning
- Learning by doing, working in your local environment helps you set priorities and identify challenges

Fear-based appeals, Yes or No?

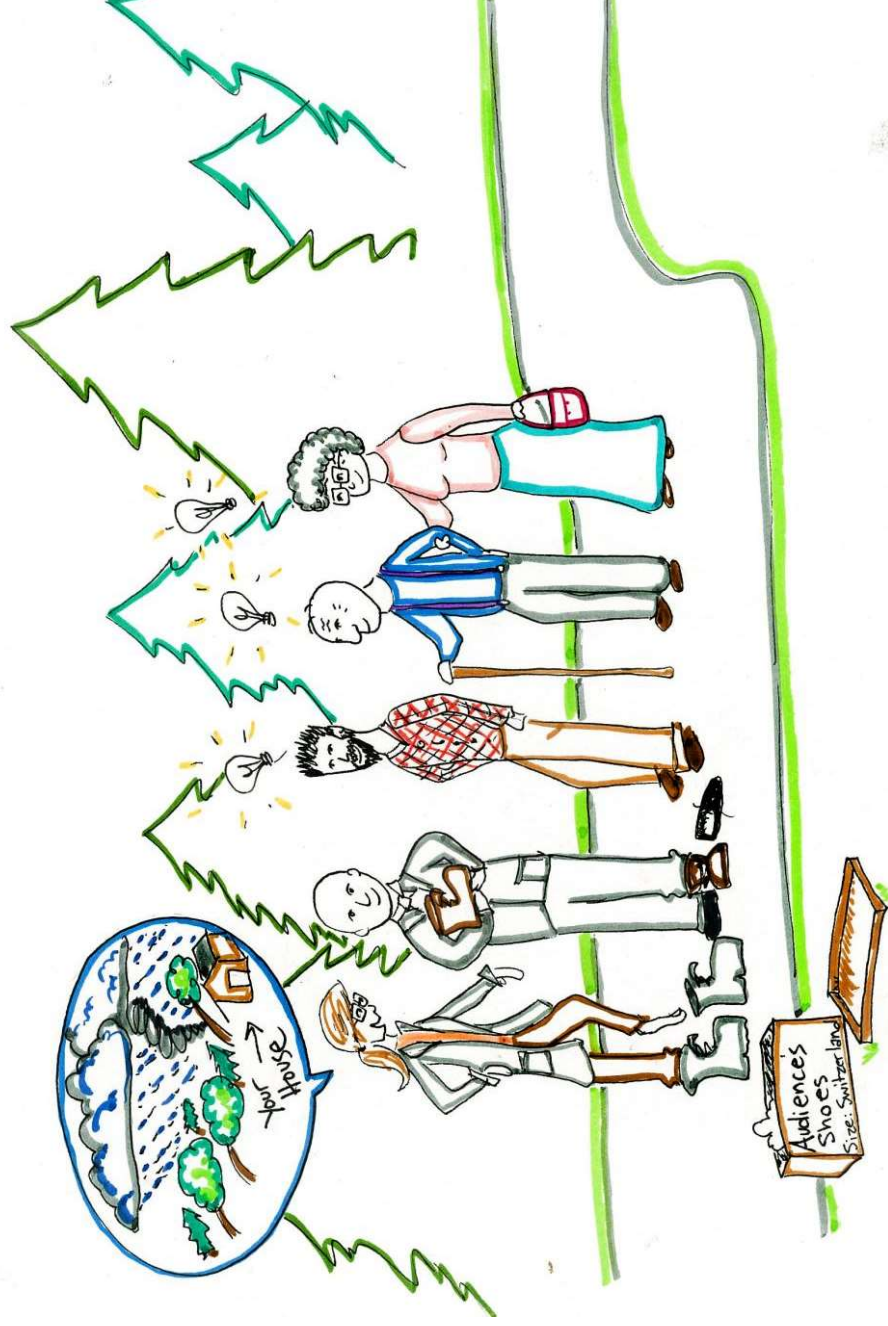
Storms or droughts offer prime opportunities to **raise awareness** of climate risks perceived as distant or abstract. **Necessary** to give people feeling that they can do something



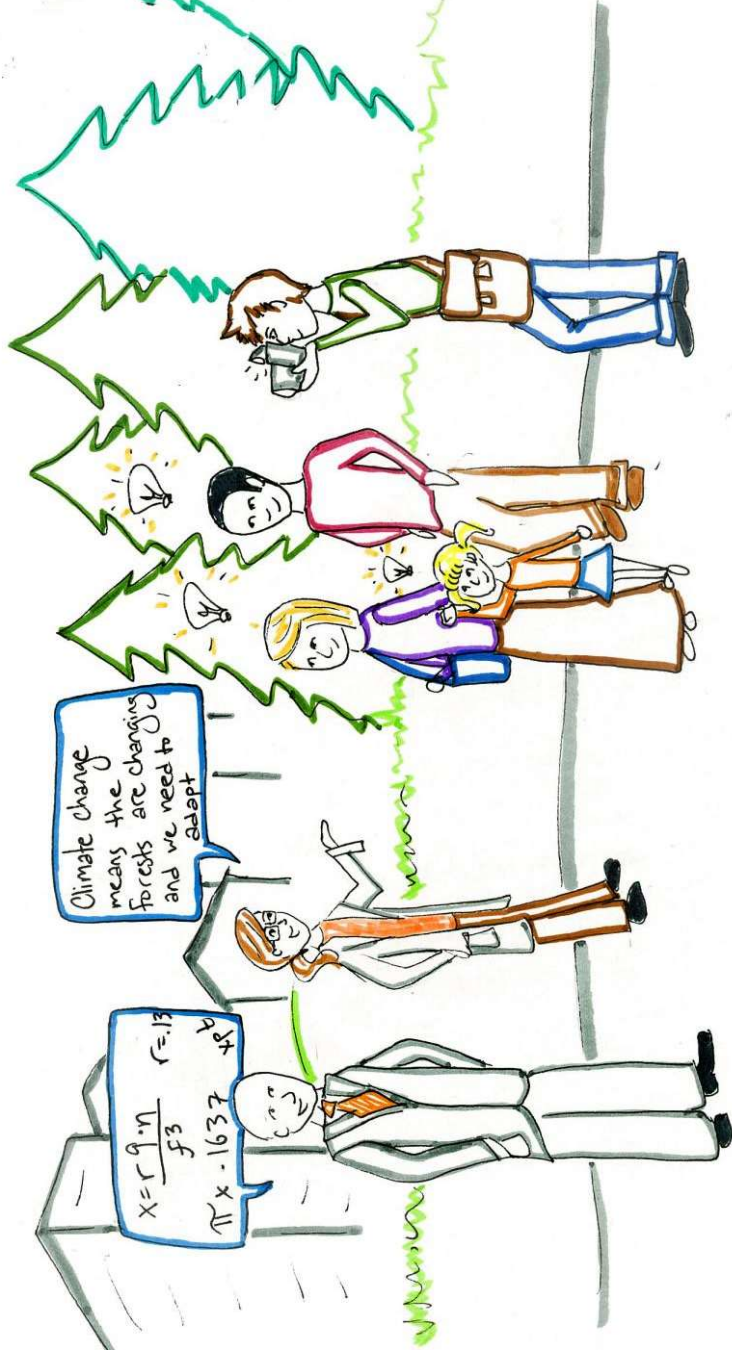
Trust building



Putting on someone else's shoes



Adapt your language



Activity three

What has worked for you?

What could you have done better?

Swedish experience with communication

- The Swedish Forest Agency (SFA) has been very active in communicating about climate change risks and adaptation measures
- Two main communication projects: “Forest owners and climate” and “Forestry in a changing climate” took place between 2011 and 2014 and involved almost 25,000 forest owners in evening meetings, courses or individual consultations with experts from the SFA
- SEI was not involved in either project, but we were given the chance to use data later

Data

Comparative survey

Survey with two groups of Swedish forest owners:

- 1) 3000 randomly selected
- 2) 3000 that had participated in SFA'S climate communication projects

Cross-sectional, single-blind test

Focus Groups

Focus group discussions and surveys with 48 Swedish forest owners

Surveys before, 6 months after and 4 years after end of focus groups

Longitudinal, purposeful sampling

Results Cross-sectional analysis

Group differences	Control Group	Communication Group
	Mean (standard deviation) ^a	
Statement		
I consider the risk of climate change to my own forest to be very serious	2.90 (1.10)	3.00 (1.10)
I believe that I have enough knowledge to adapt my forest to climate change	2.69 (1.10)	3.03 (1.10)
I believe that extreme events in Sweden the past 10 years have been caused by climate change	3.13 (1.21)	3.23 (1.20)
I consider climate science to be trustworthy	3.22 (1.11)	3.32 (1.10)
I need to take climate change into greater consideration	2.75 (1.10)	3.00 (1.05)

Results: Focus groups

Statement	Percentage of valid responses agreeing		
	T-0	T-1	T-2
I consider the risk of climate change to my own forest to be very serious	42	35	29
I consider the consequences of climate change for my forest to be negative rather than positive	35	23	28
I believe that I have sufficient knowledge to adapt my forest to climate change	26	25	34
I consider climate science to be trustworthy	45	58	59
I need to take climate change into greater consideration	52	70	61

Group differences	Control Group	Communication Group
Forest management options	Mean (standard deviation) ^a	
Taking local conditions into greater consideration during commercial cutting or replanting	2.30 (0.94)	2.13 (0.08)
Shortening rotation periods between planting and commercial felling	3.04 (0.99)	2.78 (1.03)
Increasing mix and diversity of tree species	2.58 (1.03)	2.31 (0.95)
Heavier pre-commercial thinning	2.64 (1.04)	2.31 (1.00)
Continuous-cover forest management	2.63 (1.18)	2.80 (1.24)
Taking measures against biohazards such as insects	2.86 (1.06)	2.66 (1.05)
Improvements to drainage systems and dikes	2.58 (1.10)	2.37 (1.04)

Conclusions

- Cognitive factors—trust in climate science, belief in climate change and risk assessment—are much better in explaining individual adaptation than income, education or even experiences with extremes
- The cross-sectional comparison suggests that communication has a significant but small influence on individual adaptation. Timing of communication may be key to greater impact
- The longitudinal analysis shows that communication can lead to behavioural changes, but also to discounting of risks
- Importantly, results also suggest that communication promotes individual adaptive action *indirectly* by affecting personal beliefs about climate change risks, its severity and salience, and the urgency to adapt
- Adaptation measures are generally considered as too weak

Final discussion

What do you know about the knowledge needs of forest owners, and other land use managers and stakeholders, in your biosphere reserve?