



Assessing and explaining the effectiveness of climate change communication

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Climate change communication (CCC) is a new concept that describes efforts that aim to disseminate scientific information about climate change, raise public awareness about climatic risks and adaptation measures and encourage behavior change for adaptation. Despite its growing popularity, quantitative assessments of CCC are largely absent in the scientific literature at this point.

The objective of this study is to close this gap by providing a comprehensive, quantitative assessment of the effectiveness of CCC in engaging people with adaptation and promoting adaptive behavior. The study asks if CCC can lead changes in attitudes and behavior regarding adaptation to climate change risks.

The empirical data of this study comes from a survey of 6000 forestry owners in Sweden. Half of these forest owners took part in a CCC project run by the Swedish Forestry Agency. Participants in this project were given information and practical guidance about the risks of climate change and viable adaptation measures.

The study assess if perceptions and attitudes about climate risks and adaptation differ significantly between forest owners that have and forest owners that have not participated in the CCC project. In detail, we use multivariate regression and related statistical methods to estimate the effect of CCC on the perception of climate risks, perceived efficacy of adaptation measures, perceived self-efficacy and actual adaptive action of participants and non-participants of CCC.

The study also examines the influence of preference for different forestry objectives, personal experience with extreme events, trust in climate science, gender, age, social capital, education and dependency on income from forestry activities as well as other factors on the perception of climate change risks, the efficacy of adaptive measures and their own ability to adapt to climate change.

Results from the study will offer valuable insights into how existing CCC can become more successful in engaging certain target groups with climate change. Key insights suggest that CCC can be improved if it addresses the varying objectives, needs, experiences and decision making processes of different user groups of climate services.