

# **Effective Communication on Climate Change: The Need of the Hour**

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## **I. Introduction**

Have you tried to explain to family, friends, colleagues or the general public about how the climate is changing, how it affects them and their families, and what they can do about it? Audiences in developing countries generally do not need to be convinced that climate change is happening, as they can see the evidence before their eyes, from searing heatwaves and increasing numbers of heat-related illnesses and deaths, to failing and flooded food crops, and inundated coastal zones (Dupar, McNamara, and Pacha, 2019). Climate change, which has become a serious global threat is a looming challenge to economies around the world. Natural hazards destroy lives and livelihoods, and have long-term consequences for human and economic development and as such, how we communicate about climate change to the people is important. Pressing issues such as global warming are a serious problem that affects communities around the world and effective communication to educate the public could have many potential roles in reducing climate change and its effects.

## **II. Climate Change**

The climate is the average weather over a period of decades, typically 30 years or more (Chadwick, 2016). Climate change is the differences in the climate system that persist for extended periods of time and can be attributed directly and indirectly to human activity (IPCC, 2013). Global warming can be defined as the increase in the average atmospheric temperature of the Earth across many decades; thus, global warming is one example of climate change (Chadwick, 2017). The changing climate affects the ecosystems upon which we depend, human health, food and water supplies, livelihoods, infrastructure, and security (IPCC, 2013). Current and future climate changes can be attributed to the direct and indirect results of human actions (IPCC, 2013) and, in as much as human behaviors are responsible for changing the climate, human behaviors can also mitigate climate change (Steg and Vlek, 2009). Climate change has been identified as one of the greatest challenges facing humanity (Schneider, 2011) and is known to be a fundamental threat to sustainable development, and to have severe consequences for many citizens around the globe; hence, educating the public of the causes and effects of climate change is important. Globally, many livelihoods have been disrupted, especially those that are dependent on predictable temperature and rainfall, clean water availability and arable land, and coastal communities have been affected by sea level rise causing erosion and loss of land (IPCC, 2012).

Global warming and climate change are hot and prioritized topics in the global mass media; governments and the people depend on communication and mass media for disseminating information, hence, communication media is a powerful tool for disseminating information (Wibeck, 2013). Climate change is a significant and lasting change in the statistical distribution of weather patterns over periods ranging from decades to millions of years (Yadav, and Rani, 2011). Climate change may be limited to a specific region or may occur across the globe (Yadav, and Rani, 2011). Climate change is expected to have severe consequences for many citizens around the globe, and is one of the biggest threats to food security, and a considerable amount of money and effort have gone in to educating the public of the causes and effects of climate change and how laypeople should behave to mitigate and adapt to a changing climate (Wibeck, 2013). For over a decade, social scientists have studied the public understanding of climate change, analyzing, for example, whether laypeople understand or misunderstand climate science (Etkin and Ho, 2007; Seacrest *et al.*, 2000; Sterman and Sweeney, 2002, 2007), laypeople's attitudes to various action strategies (Ohe and Ikeda, 2005) and the barriers to public engagement in climate change (Lorenzoni *et al.*, 2007a). Due to depletion of natural resources and burning of fossil fuels there is a great threat to the environment, and it is high time to save the depleting natural resources and discourage the irrational usage of natural resources by focusing on sustainable development (Yadav, and Rani, 2011). Thus communicating about climate change to stakeholders such as individuals, businesses, governments, non-government organizations and other social and economic players at local, national and global levels is crucial to change behavioural patterns and to lessen the effects caused by climate change.

### **The Importance of Communication to Mitigate Climate Change**

The fact that climate change is happening is visible and public awareness and effective communication of climate change is crucial. Strategies such as campaigning and social marketing strategies together with various campaigns can be adopted to bring about changes in public policy, corporate policy and citizen behaviour, and cooperation among science, policy and civil society. (Dupar, McNamara, and Pacha, 2019). A good example of effective communication to bring about public awareness about the adverse effects of climate change, are the methodologies adopted by Greta Thunberg, the Swedish high school student, who successfully brought about change through her weekly school strikes to protest inaction on climate change. She has started a global youth movement and shown what can be achieved by a voice that is fuelled by passion, conviction and climate science (Dupar, McNamara, and Pacha, 2019). Her desire to communicate the ill-effects of climate change have brought her invitations to speak at many international fora.

People want to know how climate change is going to affect the places they know, value and depend upon – whether they depend on their environment for jobs and livelihoods, food and energy security, safe and tolerable living conditions, or for recreation, culture, religion and spirituality (Dupar, McNamara, and Pacha, 2019). When those places are under threat due to the effects of climate change such as heavy rainfall, sea level rise, drought and heat, people want to know what measures they can take to adapt and cope with the impacts and minimize the effects of climate change. Hence communication is an imperative ingredient in the mitigation of climate change.

There is an increasing appetite among communities and community-based organisations to strengthen their effectiveness in communicating their own experiences of climate change ‘upwards’ to policymakers and ‘outwards’ to other communities and sectors of society, to generate support for more resilient and sustainable development (Dupar, McNamara, and Pacha, 2019). The use of simple language is an effective tool in communicating the implications of climate change to peoples all over the world. This includes the omitting of scientific jargon so as to portray climate impacts simply, and opening up discussions with experts and the general public about practical solutions that could be included, which involve the general public. Thus public awareness about the impacts of climate change is important, and for this, keeping the channels of communication open between stakeholders is of vital importance. Much of the research in climate change communication focuses on public understanding of climate change, factors that affect public understanding, media coverage and framing, media effects, and risk perceptions. (Dupar, McNamara and Pacha, 2019).

Many countries are highly vulnerable to adverse impacts of climate change; and the influence of climate change impacts is looming over every conceivable level, be it global, regional, national or local, that calls for multi-level action, and as such, national level actions have to play a critical role while international cooperation is also important (National Adaptation Plan for Climate Change Impacts in Sri Lanka: 2016-2025). Campaigning is an effective tool that could be used by climate communicators to kindle public interest with projects to educate the public, as citizen behavior is an important ingredient in the preservation of the environment for the greater good of all communities. This could positively impact policy makers who make changes in public policy, corporate policy and bring about cohesive links between cooperation among science, policy and civil society. (Dupar, McNamara and Pacha, 2019).

While the Earth has experienced climatic changes through time, compelling empirical and simulated data depict these changes as occurring more rapidly than at any other period in recent human history (Christensen et al., 2007). Climate change presents significant ecological and social challenges to natural resource agencies, which are responsible for managing changing landscapes while at the same time communicating the impacts of this phenomenon and associated management responses with increasingly concerned public audiences (Schweizer, Thompson, Teel and Bruyere, 2009). For communication efforts to be effective, it is important to foster dialogue between local communities by focusing on their needs, which can help to create and achieve specific goals for adaptation. To aid the design of communication strategies we also need a better understanding of how climate change adaptation is perceived by multiple actors and at multiple scales (Lumosi and Mogahey, 2016). In this endeavor, the media plays an imperative and important role in raising climate change concerns in policy arenas and framing public discourse. More careful consideration should be given to the knowledge and perceptions of these communicators (Lumosi and Mogahey, 2016).

### **III. Conclusion**

Societies are likely to undergo changes over the next several decades due to the adverse effects of climate change, thereby making them vulnerable to a climate that is more extreme than it is today (Muttarak and Lutz, 2014). Climate change could be viewed as a fundamental threat to sustainable development. Thus it could be said that climate change communication acts as a wake-up call to governments, decision makers and the public, and is an important player in the preserving of the environment as a whole for the present and the future. The aim of communication on climate change is to help develop strategies that enable societies to better cope with the consequences of climate change which, in turn, bring about threats such as hurricanes, floods, forest

fires, heat waves, sea level rise and changes in humidity and temperature patterns, whilst being aware of preserving what is left of the environment (Muttarak and Lutz, 2014). Climate change influences the patterns of human mobility and exacerbates existing economic, demographic, social and environmental migration drivers (Mombauer and Wijenayake, 2020). The ways in which societal and environmental systems can mitigate and adapt to climate change will directly influence the magnitude of impacts (IPCC, 2014). Among the greatest risks of climate change are the dangers it poses to civilization and its potential to be an important driver for natural disasters, droughts, poverty, famine, food and nutritional insecurity, and global health problems (Poortvliet *et al.*, 2020). Communicating about these issues is challenging, and effective climate communication depends on how the message is designed, and how it resonates with the intended audience, and, studying the effectiveness of climate change risk communication is important to stimulate the recipients' awareness and behavioural change (Poortvliet *et al.*, 2020). Hence, more research is needed to evaluate the tensions between mass communication approaches that match the urgency and scale of the adaptation challenge versus the need for more interactive approaches that improve the local relevance and usability of climate information (Lumosi and Mogahey, 2016) as uninformed climate change consequences could destroy lives and livelihoods and have long-term consequences on human and economic development (UN Office for Disaster Risk Reduction, 2011).

### References

- [1]. Chadwick, A. E. (2016). *Climate change, health, and communication: A primer*. *Health Communication*, 3, 782–785.
- [2]. Chadwick, A. E. (2017). Climate Change Communication. Retrieved from <https://doi.org/10.1093/acrefore/9780190228613.013.22>
- [3]. Christensen, J. H., Hewitson, B., Busuioc, A., Chen, A., Gao, X., Held, I., et al. (2007). Regional climate projections. In S. Solomon, D. Qin, M. Manning, Z. Chen, M. Marquis, K. B. Averyt, M. Tignor, & H. L. Miller (Eds.), *Climate change 2007: The physical science basis. Contribution of Working Group I to the fourth assessment report of the Intergovernmental Panel on Climate Change* (pp.847-940). New York: Cambridge University Press.
- [4]. Dupar, M., McNamara, L. and Pacha, M. (2019). *Communicating climate change: A practitioner's guide*. Cape Town: Climate and Development Knowledge Network.
- [5]. Etkin, D. and Ho, E. (2007). Climate change: perceptions and discourses of risk. *Journal of risk research* 10:623–641.
- [6]. IPCC (2012). *Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation*.
- [7]. IPCC. (2013). Climate change 2013: The physical science basis. Contribution of working group I to the fifth assessment report of the Intergovernmental Panel on Climate Change. T. F. Stocker, D. Qin, G. -K. Plattner, M. Tignor, S. K. Allen, J. Boschung, P. M. Midgley (Eds.). New York: Cambridge University Press.
- [8]. IPCC. (2014). Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change. In *Climate Change 2014: Synthesis Report; Core Writing Team, Pachauri, R.K., Meyer, L.A., Eds.; IPCC: Geneva, Switzerland; p. 151.*
- [9]. Lorenzoni, I., Nicholson-Cole, S. and Whitmarsh, L. (2007a). Barriers perceived to engaging with climate change among the UK public and their policy implications. *Global Environmental Change* 17:445-459.
- [10]. Lumosi, C. and Mogahey, D. (2016). *Communicating climate change for adaptation: challenges, successes and future priorities information brief*. International Development Research Centre
- [11]. Mombauer, D. and Wijenayake, V. (2020). *Climate Change and Human Mobility in Sri Lanka. Policy brief developed by the SLYCAN Trust by SLYCAN Trust August 2020*
- [12]. Muttarak, R. and Lutz, W. (2014). Is education a key to reducing vulnerability to natural disasters and hence unavoidable climate change? *Ecology and Society* 19(1): 42.
- [13]. National Adaptation Plan for Climate Change Impacts in Sri Lanka: 2016-2025. Climate Change Secretariat, Ministry of Mahaweli Development and Environment, (2016)
- [14]. Ohe, M. and Ikeda, S. (2005). Global warming: Risk perception and risk-mitigation behaviour in Japan. *Mitigation and Adaptation strategies for global change* 10:221–236.
- [15]. Poortvliet, P.M., Niles, M.T., Veraart, J.A., Werners, S.E., Korporaal, F.C. and Mulder, B.C. (2020). *Communicating Climate Change Risk: A Content Analysis of IPCC's Summary for Policymakers*. *Sustainability* 2020, 12, 4861. Retrieved from [www.mdpi.com/journal/sustainability](http://www.mdpi.com/journal/sustainability)
- [16]. Schneider, R. O. (2011). Climate change: an emergency management perspective. *Disaster Prevention and Management* 20:53-62.
- [17]. Seacrest, S., Kuzelka, R. and Leonard, R. (2000). Global climate change and public perception: the challenge of translation'. *Journal of the American Water Resources Association* 36:253–263.
- [18]. Schweizer, S., Thompson, J.L., Teel, T. and Bruyere, B. (2009). *Strategies for Communicating About Climate Change: Impacts on Public Lands*. *Science Communication*. Vol. 31, No. 2, pp 266-274. Sage Publications.
- [19]. Steg, L. and Vlek, C. (2009). *Encouraging pro-environmental behaviour: An integrative review and research agenda*. *Journal of Environmental Psychology*, 29, 309–317.
- [20]. Sterman, J. and Sweeney, L.B. (2002). Cloudy skies: assessing public understanding of global warming. *System Dynamics Review* 18:207–240.
- [21]. Sterman, J. and Sweeney, L.B. (2007). Understanding public complacency about climate change. *Climatic Change* 80:213–238.
- [22]. UN Office for Disaster Risk Reduction, *Global Assessment Report 2011: Revealing Risk, Redefining Development* (Geneva, 2011).
- [23]. Wibeck, V. (2013). Enhancing learning, communication and public engagement about climate change – some lessons from recent literature. *Environmental Education Research*. Taylor and Francis (Routledge): SSH Titles. (Linköping University Electronic Press)
- [24]. Yadav, Y.P. and Rani, R.J. (2011). Role of communication in climate change and sustainable development. *Global Media Journal Vol. 2/No.2*