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Towards the pond-filling theory: Artificial Intelligence and bigdata based global analysis to link the levels of communication to action triggers

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Abstract

The involvement of large stakeholder groups is required to reach solutions in global environmental challenges, such as climate change. This involvement necessitates extensive global communication. Also, there is a potential link between the sheer amount of communication and the action triggers, meaning that a certain level of communication is needed before the action. Nevertheless, it can be challenging to prove some level of correlation, or even causality, between the communication and the action due to the scale of the required analysis. The analysis might entail covering global communication coverage for decades.

However, this challenge could be approached by means of big data analytics by creating a chart that describes the increase in global communication with its content and the related global agreements. This type of analytics would require extensive research efforts and possibly large computational capacity. We could borrow from biology to support the problem by considering how algae and bacteria grow exponentially in a pond until reaching the pond's maximum bearing capacity. We can propose that global communication and its linkage to action have similarities to the exponential growth in a pond. While the filling of the first half of the pond takes years, the filling of the latter half

is rapid. The analogy between biology and global environmental issues, such as climate change, is suggested to have similarities.

We argue that while the filling of the global communication pond can take years, the action comes rapidly after the pond filling has reached the triggering level. This research presents an example of applying artificial intelligence and big data-based global analysis to link the levels of communication to action triggers.

The findings contribute toward the potential pond-filling theory in global communication and call for further research in the area, instigating an open global research call.

Keywords: Sustainable development, Environmental effect policy mechanisms, global warming