

## Chapter 73

# Science Communication as a Tool for Advancing the Environmental Education on Climate Change: Can Africa Do It Better?

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### **ABSTRACT**

*The aim of this chapter to describe and explain the role of science communication as a method to advance environmental education on climate change with a special reference on Africa being one of the regions suffering from the effects of climate-induced disasters and risks in the increased anthropogenic effects of modern development. The overall impression globally and regionally is the scientists are poor communicators on what they do hence are often misunderstood by the media and society over the work they spend their life and effort doing. The buttressing methodological philosophy to this chapter is applied systems approach that views actors, processes, inputs and outputs of the climate change, policy and science as intricately related hence require a trans-disciplinary, interdisciplinary and multi-disciplinary approach. However, critical areas of reference are health and diseases, resilient communities, coastal adaptation and farming practices and technologies.*

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## **INTRODUCTION**

The issue under discussion is not to debate on whether Africa is able to cope with climate change or not. Rather, the debate centers on the mechanisms that can be used to make people understand what climate change is all and how they can mitigate its negative impacts. Banda (2013) brings in the aspect of media coverage as one of the most important mechanisms for spreading climate change related information. Everyone needs to know about climate change. Climate change is a science and it is this science which the ordinary people need to fully understand so that they can adequately deal with its consequences. The reporting of information on climate change can be done in many forms of media including radios, televisions, and magazines among others. Banda (2013) points out that the most important and significant research appears in journals such as *Nature Climate Change*, *Geophysical Research Letters*, *Nature*, *Science*, *PNAS*, and *Climatic Change*. It is not an issue of where climate related information is disseminated, but the biggest question is whether the victims of climate change really grasp the message being conveyed. Radio journalists are more able than most to interact directly with their audiences and bring audience-contributions into their stories. According to Goh et al, (2008:8), “effective science communication requires attention to the messages that are to be conveyed that depends on the “art” of communication, allowing adequate time to produce science communication products that includes time for feedback and revision. Good science communication requires attention to both the science and the presentation. In general practice, the vast majority of the effort by scientists is in the collection and analysis of data, with little time or resources devoted to the communication of science. Rather than science communication being an afterthought, factoring in the time and resources that are needed for developing a quality communication product is recommended”. The aim of this chapter to describe and explain the role of science communication as a method to advance environmental education on climate change with a special reference on Africa being one of the regions suffering from the effects of climate-induced disasters and risks in the increased anthropogenic effects of modern development. We argue for a strong possibility of science communication as tool for advancing environmental education on Climate Change, focusing on Africa. Africa has been witnessing serious challenges relating to climate change.

## **BACKGROUND**

There exists a very strong connection between science communication and environmental education. In southeast Mexico, for example, a multifaceted, comprehensive teacher-training project was implemented and code-named Education for Sustainable Development. The project included training workshops, seminars, congresses, forums and distance education. New teaching units were added to textbooks, including topics on biodiversity, pollution and deforestation. Strategies to raise awareness include media campaigns, messaging through youth radio programs, theatre and music, conferences, environment day celebrations, and other events and programs within and outside of school can complement formal curricula and significantly strengthen learning (Iltus,2013). In all these cases, there is an aspect of disseminating scientific knowledge through other means, and at the same time raising awareness on environmental issues. Overall, in both formal and informal arrangements of education, the communication on the definition and science, characterization, policy and advocacy on climate change, a lacuna exists on how to do this in a defined and compelling manner. Perhaps and would be expected

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