

MEDIA'S UNTAPPED POTENTIAL IN THE CLIMATE CRISIS

THE CASE FOR MEDIA INTERVENTIONS TO ENGAGE AND MOTIVATE



Global Alliance
for Social and
Behaviour Change



MEDIA'S UNTAPPED POTENTIAL IN THE CLIMATE CRISIS

THE CASE FOR MEDIA INTERVENTIONS

TO ENGAGE AND MOTIVATE

"If we cannot imagine our way out of the climate crisis, with the help of creatives, we will – frankly – not make it"

- **Christina Figueres**

Founding Partner, Global Optimism and Former Executive Secretary of the United Nations Framework Convention on Climate Change, at the BBC Climate Creatives Festival 2021

Introduction

Negative news stories and communication around climate change can make us feel hopeless about the future of our planet. Around the world, millions of people are struggling to respond to the climate crisis or need help to understand climate science, engage with policy discussions on carbon emissions and adopt sustainable behaviours. Never has adaptability, innovation, and transformation been so urgently needed. As the broadcaster, natural historian, and author Sir David Attenborough said "Saving our planet is now a communication challenge. We know what to do, we just need the will."

Little is written about how social and behaviour change communications (SBCC) interventions can support Sustainable Development Goal 13 (SDG13) on Climate Action. This policy brief pulls from a recent review of SBCC-focused literature found in the Evidence for Impact database developed and managed by the Global Alliance For Social And Behaviour Change. The brief highlights evidence on how interventions that use media - mass, social, and digital (including games) - can support individuals and communities to take action to combat climate change and its impacts.

The current evidence suggests that media can play an important role in supporting these targets by engaging people on climate issues, motivating action either individually or collectively, and enabling people to express their views and hold decision-makers accountable. However, much of the available SBCC evidence comes from so-called WEIRD - Western, Educated, Industrialized, Rich, and Democratic – countries. About 82% of the studies in the database which support climate action focus on encouraging people to take actions to mitigate climate change. Only 11% focus on helping people adapt to climate change, suggesting there is a need to generate evidence of what works to support those living in countries most affected. As well as highlighting current evidence gaps, challenges, and innovations, this brief outlines policy recommendations to ensure that media and communication can maximise their contribution to SDG13.

Overview of Evidence

Evidence on the role media interventions can play in climate change mitigation

is primarily generated from initiatives in North America, Australia, and Europe. These initiatives promote concern for climate change and encourage people to take actions to reduce their own carbon emissions or energy consumption, recycle waste, or advocate to policy makers, and support public action. The evidence on the role media can play specifically has been generated in two formats:

- environmental documentaries/movies
- application/games

ENVIRONMENTAL DOCUMENTARIES/MOVIES

aimed to influence audiences' perspectives, knowledge, and behaviour.



Studies show that documentaries can have an impact on people's knowledge and their level of concern, as well as encourage people to take action. The evidence shows that documentaries are most successful where they suggest clear, accessible actions that people can take, and are able to reach and engage people who are not already taking simple pro-environmental actions. Here are two examples of studies that provide evidence of the role of documentaries:

Jacobsen (2011) found in areas in the US where *An Inconvenient Truth* (Al Gore's 2006 documentary film about global warming) was shown, there was a 50% relative increase in purchasing voluntary carbon offsets in the two months following the film's release compared to normal times, which did not happen in areas where the film was not shown. However, the natural experiment did not find evidence that audience members continued to purchase carbon offsets one year later.

A randomised control trial carried out by Dunn et al. in 2020 found that people who watched episodes of nature documentary *Blue Planet II* with high levels of conservation content, had higher knowledge scores after screenings than the control group (who watched episodes with no conservation content). However (and possibly because no details were provided on what actions audiences could take), this increased knowledge did not translate into action: the treatment group were no more likely to choose a snack with environmentally friendly packaging after the film than the control group.



Additionally, studies carried out on how to frame climate change to encourage individual action, have found communication needs to highlight scientific consensus on the issue (Van der Linden, 2015), and generate concern but not hopelessness, by providing information on clear, accessible individual and collective actions people can take (Bilandzic 2017).

Recommendation: Media interventions need to be linked to clear actions, tied in with relevant local groups/programs and not be one-off, but sustained interventions that create momentum beyond being an initial catalyst.

APPLICATIONS OR GAMES designed to change individuals' behaviour

Studies found competition to be a critical motivator in encouraging behaviour change amongst individual game/application users. Engaging games with competitive elements can reach high carbon emission users and people who are not already concerned about climate change and encourage formation of new habits. The studies suggest that giving people tools to analyse their own motivations and actions, and/or being observed by others, can positively influence people's actions.

When testing the efficacy of a Personal Carbon Footprint Management System (PECAFOMS) application in Taiwan through an experiment, Lin (2016) found the element of competition acted as a motivator: students were competing against classmates to reduce their carbon footprint. All participating students reduced their carbon emissions and they varied in their choices about how to do this, suggesting an individualised approach helps people monitor and make personal decisions about how to reduce their carbon footprint.



Robelia et al (2011) also found the competitive element in the Hot Dish Facebook application of gaining points through completing 'challenges' led users to change habits, which they then continued. However, as people self-selected to use the app, which encourages people to interact and support each other to engage in more sustainable activities, they had higher knowledge and took more pro-environmental actions than the general population before they started using it.

Ro et al (2017) studied the effectiveness of the Cool Choices game (where players claim credit for completing environmentally sustainable actions), with 220 employees from a US company. They found that players with high carbon emissions changed their habits the most, seeing the highest self-reported changes in behaviour, and the highest reductions in actual household energy use. The study also found the competitive element among colleagues to be crucial: employees compete in teams to gain points for taking sustainable actions, and this makes it socially compelling to change ones' behaviour.

Recommendation: Interventions aiming to influence individual actions should consider how competition can be a motivator, particularly if trying to reach people who are not already taking action. However, there is little evidence to suggest whether games are able to achieve scale and lead to long term behaviour change.

Media interventions focused on climate change adaptation

aim to help people make changes to reduce the impact of climate change on their lives. These interventions are usually aimed at people in developing countries most affected by climatic change, promote actions individuals can take, and encourage communities to hold decision makers to account on resilience issues.

Evidence on the role of media in climate change adaptation is limited, and primarily comes from three initiatives:



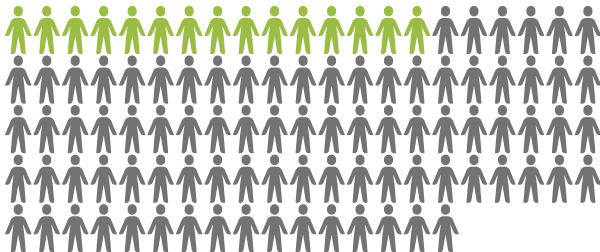
Amrai Pari (Together we can do it) - a Bangladesh reality television series which set resilience-related challenges to communities across the country, aiming to help audiences better prepare for and cope with changes in the climate.

Nyakati Zinabadilika (The Times/Winds are Changing) - a radio programme aiming to increase Tanzanian's knowledge about actions they could take to build their resilience to climatic changes, and increase demand for greater accountability;



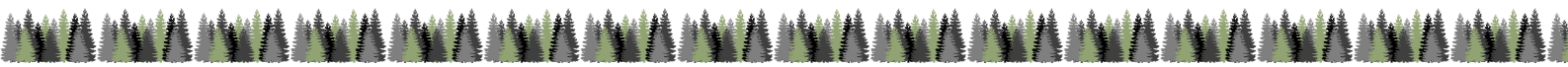
Shamba Shape Up - East Africa's longest running agricultural 'edutainment' television series, providing methods and advice to farmers (or those with access to TV) and broadcast on national TV stations in Kenya, Tanzania and Uganda since 2012.

All three initiatives showed that people who had been exposed to the media content were significantly more likely to have high knowledge and take actions to adapt to the climatic impacts that they were feeling (e.g., cultivating different crops, making home adjustments). For example, the 2015 survey evaluation of *Nyakati Zinabadilika* found that listeners were significantly more likely than non-listeners to say they had carried out a range of resilience-related actions, including cultivating new types of crops and learning a new skill to supplement income.



All three programmes reached audiences at scale: Amrai Pari reached 15% of the population of Bangladesh in its first year; Nyakati Zinabadilika reached 15% of adults in Dodoma and Morogoro (the target regions); and 13% of households in the study area in Southern Kenya had watched Shamba Shape Up in 2014.

Recommendation: Evidence suggests media interventions aiming to influence adaptation should provide people with easily replicable actions that have a clear economic benefit to them. Content should reflect ‘people like them’ so audiences can identify with the issues being faced, and gain confidence they can take similar actions. Showing experts providing advice to ordinary people enables audiences to see the relevance of the advice being given.



Media interventions focused on strengthening climate-related governance and accountability

do not feature strongly in the database. The evidence which does exist suggests that culturally tailored local storytelling can help to strengthen accountability and build a culture of care towards natural resources. In rural Tanzania, the drama Mikoko Yetu (Our Mangroves) told the story of local ranger rallying his community to oppose a corrupt deal that would destroy their mangrove forests. Evaluated using community screenings, an experiment found the drama increased knowledge of climate change, increased support for environmental protection as a political priority, and increased support for pro-environmental policies and candidates (Rahmani et al, 2022).



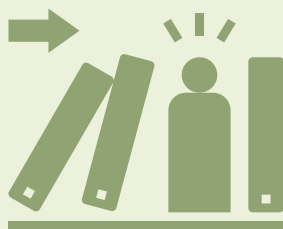
In Indonesia, a TV drama in Bahasa Indonesia called *Our Story (#CeritaKita)* was supported by a discussion programme and social media. A large-scale survey conducted across three islands showed the project reached approximately 24.5M people (17% of adults) and found that watching the content increased awareness of the impacts of climate change and was associated with taking action (e.g., participating in environmental groups, managing household waste, or minimising food waste).

An experimental evaluation of a two hour distillation of the drama showed exposure increased climate change knowledge, support for more media coverage on climate change, and willingness to share social media content on the subject. Like Mikoko Yetu, Our Story also increased support for more policy action on climate despite this not being explicitly covered in the drama (Green et al., 2022). A follow up experiment approximately five months later found that knowledge effects persisted, but other effects of the two-hour drama faded.



Recommendation: Consider the role of narrative entertainment in modelling effective collective climate action.

Identified Gaps in Current Evidence around Climate Change



There is a dearth of mixed method studies particularly those that provide information on **how and why interventions work** to encourage social and behaviour change (SBC).



There is a gap in evidence for interventions that seek to **support systematic changes** in how climate change is communicated. This includes interventions that nurture strategic links between media, climate and weather experts, and government, and support the broadcast industry to improve their climate content.



Greater evidence is needed on what leads to longevity in **SBC**.

Challenges

DRIVING AND SUSTAINING BEHAVIOUR CHANGE OVER TIME

media-based SBCC interventions should be integrated with community interventions and complemented by capacity strengthening and advocacy interventions to address barriers of taking short term and long-term actions (e.g., gender norms, government support, resources required).



ENGAGING AUDIENCES WHO ARE LESS CONCERNED OR SCEPTICAL ABOUT CLIMATE CHANGE ISSUES

to have maximum impact, investment needs to be made in media interventions which target and understand people who are less concerned about these issues to engage them effectively

REACHING THE PEOPLE MOST AFFECTED AND VULNERABLE TO CLIMATE CHANGE

these people often live in isolated areas and have less access to media and mobile technology. Investment should be made in interventions which can look at targeting their influencers or deploying outreach interventions to reach them.



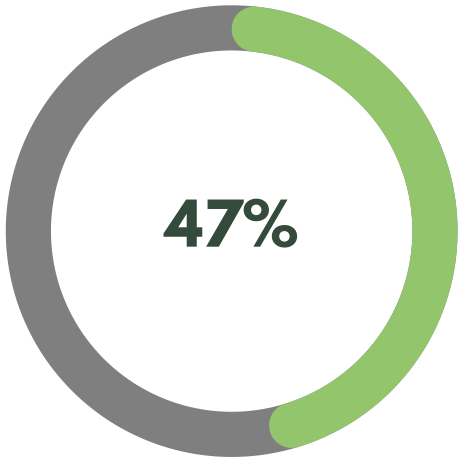
Innovation



Amrai Pari (Together we can do it!) was an innovative reality television programme, supporting individuals and communities to make changes to cope with climate changes across Bangladesh.

Quantitative and qualitative formative research found that audiences were feeling the effects of climate change and were motivated to take action but did not feel prep-

-ared to deal with extreme weather and faced financial barriers and felt they needed government support to act. It found communities who felt they could work with others were more likely to take action, and people were finding innovative solutions to some of the changes they were experiencing. The TV programme, which was broadcast on national channels with high reach, used a 'make over' format, challenging communities to complete a task they had set themselves within a certain period of time, (e.g., strengthening storm defences, integrating certain agricultural techniques). Thereby, simple, cheap, and replicable techniques were showcased, which people could do with materials and tools available to them locally.



Amrai Pari reached 15.4% of the adult population of Bangladesh in its first year on air. It was successful at engaging men and women equally, and reached some of the poorest and least educated people in Bangladesh. Audiences felt motivated by seeing “people like them” making changes, and nearly half (47%) of audience members said they had taken action as a result of watching the programme. Regression analysis found regular audience members were more likely to have taken action than non-audience members, when controlling for socio-demographic factors.

Amrai Pari provides a strong example of how a programme based on a clear theory of change and insightful research to understand audiences, can lead to impact.

Recommendations

To realise the potential that media (and SBCC) has in supporting climate action, it is critical we learn from existing interventions and act, based on what does and does not work. As outlined above, this brief has demonstrated that media can play an important role in supporting climate action, but stronger evidence is needed, particularly in the developing world, to drive much needed investment.

For governments



- Integrate media and communication into National Adaptation Plans and disaster risk reduction strategies.
- Urgently support national and local discussion on climate change, climate impact and importantly solutions (policy, business and individual).

For donors



Improve climate communication through support to public interest media and SBCC.

Integrate SBCC into existing climate financing - evaluating scale, impact, and social value.

Continue to collate and synthesise evidence on SBCC interventions to support SGD13.

For maximum impact, these interventions need to:

CONNECT THE DOTS

between climate change and energy, extreme weather, public health, food and water, jobs and the economy, national security, and other themes, in locally relevant and engaging ways.



BE BASED PEOPLE'S REALITIES

through an in-depth analysis of different people's barriers and motivators to engage in climate issues and take appropriate climate action.

AVOID PREACHING TO THE CONVERTED

Segment audiences to understand their individual needs in order to engage and appeal to audiences who are not currently taking action and support audiences who are already taking action to influence others to do so to have more impact.



LEVERAGE INFLUENCERS

Identify people already taking action and work out ways to deploy these people to role model and explain their choices to influence others. Whether mass media or targeted individual interventions, audiences are motivated by seeing, and even competing with, the behaviour of other people like them, as per Bandura's social learning theory (1971).



HIGHLIGHT OTHERS TAKING POSITIVE ACTION

Showcasing examples, hearing from people who are already taking positive action, or putting people in competition with people like them taking actions which are within their reach, can motivate audiences to do the same.

BE SOLUTION FOCUSED

The evidence suggests that alarming content does increase audiences concern but can leave people feeling helpless. Interventions must provide audiences with clear, accessible actions, or signpost people to further resources or support, so they can act.



AUTHORS

Nicola Bailey, Senior Research Manager - BBC Media Action

Anna Godfrey, Head of Evidence - BBC Media Action

Sonia Whitehead, Head of Research - BBC Media Action

RESOURCES AND TOOLS

- Bandura, Albert (1971) Social Learning Theory. General Learning Press, New York.
- BBC Media Action (2022) Climate Change: New evidence on how media can engage youth to take action: Kembali ke Hutan (Return to the Forest): <https://www.bbc.co.uk/mediaaction/documents/indonesia-climate-change-media-research-2022.pdf>
- BBC Media Action (2017) Building Resilience: How research has been used to develop and evaluate a media and communication approach: <https://dataportal.bbcmmediaaction.org/site/assets/uploads/2016/07/Building-Resilience-research-report.pdf>
- Bilandzic, H., Kalch, A., & Soentgen, J. (2017). Effects of goal framing and emotions on perceived threat and willingness to sacrifice for climate change. *Science Communication*, 39(4), 466–491: <https://journals.sagepub.com/doi/10.1177/1075547017718553>
- Dunn, M. Mills, M. Veríssimo, D. (Sept 2020) Evaluating the impact of the documentary series Blue Planet II on viewers' plastic consumption behaviors. *Conservation Science and Practice*: <https://conbio.onlinelibrary.wiley.com/doi/full/10.1111/csp2.280>
- Geopoll (2020) Shamba Shape Up Series 10 Knowledge, Attitude and Practices survey Report 2020: https://shambashapeup.com/documents/152/SSU_Series_10_KAP.pdf
- Jacobsen, G.D. (2011)). The Al Gore effect: an inconvenient truth and voluntary carbon offsets. *Journal of Environmental Economics and Management*, 61(1), 67–78.
- Lin, S. M. (2016). Reducing students' carbon footprints using personal carbon footprint management system based on environmental behavioural theory and persuasive technology. *Environmental Education Research*, 22(5), 658–682.
- Rahmani, B., Groves, D., Montano, B., Green. D. (2022) Radio dramas can build support for environmental protection: Experimental evidence from rural Tanzania. Working paper.
- Robelia, B. A., Greenhow, C., & Burton, L. (2011). Environmental learning in online social networks: Adopting environmentally responsible behaviors. *Environmental Education Research*, 17(4), 553–575.
- Ro, M., Brauer, M., Kuntz, K., Shukla, R., & Bensch, I. (2017). Making Cool Choices for sustainability: Testing the effectiveness of a game-based approach to promoting pro-environmental behaviors. *Journal of Environmental Psychology*, 53, 20–30.
- Swim, J. K., Fraser, J., & Geiger, N. (2014). Teaching the choir to sing: Use of social science information to promote public discourse on climate change. *Journal of Land Use & Environmental Law*, 91–117.
- University of Reading (2014) Assessing the Impacts of Shamba Shape Up: <https://shambashapeup.com/>
- Van der Linden, S. L., Leiserowitz, A. A., Feinberg, G. D., & Maibach, E. W. (2015). The scientific consensus on climate change as a gateway belief: Experimental evidence. *PloS one*, 10(2), e0118489.