COMMUNICATING CLIMATE CHANGE FOR ADAPTATION: Challenges, successes and future priorities

INFORMATION BRIEF

ASSAR
Adaptation at Scale in Semi-Arid Regions

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INTASAVE CARIBSAVE Group
Working together in a changing climate

WRITTEN BY CAROLINE LUMOSI AND DANIEL McGAHEY
With input from Blane Harvey and Tali Hoffman

Communicating climate change to communities in semi-arid regions remains a difficult task. This information brief helps communicators understand best practice and helps researchers understand where knowledge gaps exist.

Key Findings

- Currently, relatively little attention is given to understanding the ways that important actors from policy, practice or the media in semi-arid regions perceive climate variability and change, and where important gaps in knowledge and information exist.
- Aside from the limitations of resource availability, adaptive capacity largely depends on the extent to which problems are understood, knowledge is accessible to vulnerable groups and policy makers, and adaptive responses are recognised and available. Framing climate change messages in line with these local contexts is crucial and greatly improves their effectiveness.
- Few attempts have been made to directly test for correlations between climate communication efforts and observed behaviour change. Yet, an understanding of this relationship can offer important guidelines for future climate communication efforts.

Introduction

In the past, efforts to communicate climate change were typically focussed on disseminating information rather than improving the understanding of adaptation challenges, raising awareness of adaptation pathways, encouraging dialogue or influencing behaviour change. Recently, however, there has been a shift towards a greater use of dialogue with stakeholders, and a stronger focus on knowledge co-generation.

Yet, communicators remain faced with three key challenges:

- effectively integrating scientific information with traditional knowledge;
- communicating this information to people and groups with varying contexts of power, agency and social dynamics;
- navigating different communication channels, learning processes and modes of knowledge transmission to ensure that necessary information is accessible to marginalised groups.

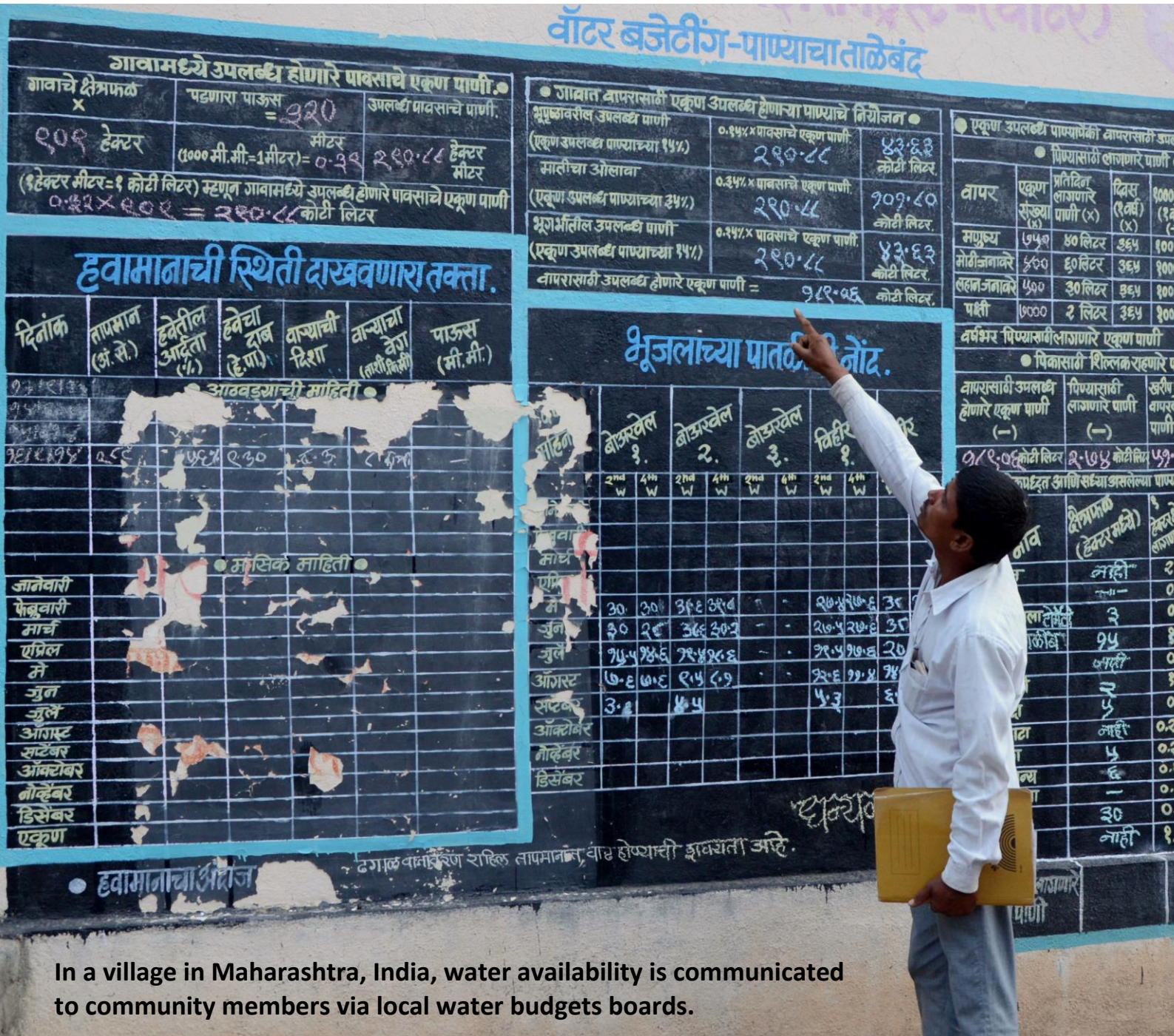
We reviewed literature from the semi-arid regions of Africa and Asia to understand the state of knowledge about climate communication activities[1]. Here, drawing on examples from case studies, we discuss the factors and conditions that support – and those that prevent – the effective communication of climate change issues and adaptation solutions among vulnerable communities.

Key lessons from the semi-arid regions of Africa and Asia

LESSON 1: Understanding the relative effectiveness of different materials and channels for conveying information can help to ensure that communicated content is useful, appropriate and accessible.

In Africa and Asia, seven primary communication channels are used to disseminate climate information to vulnerable communities, including: radio, television, mobile phones, online platforms, printed media, public demonstrations and community fora. The relative effectiveness of these channels should be assessed alongside the variables that drive and support social and behavioural change, such as: the type of information disseminated (e.g., seasonal forecasts, early warnings, short-term adaptation responses), the target audience, and the social context (e.g., culture, gender roles and responsibilities, traditions and religious differences).

Key example: For rural farmers in the semi-arid areas of Tanzania, the preferred channel of communication depends on the type of information being communicated[2]. For instance, farmers prefer to receive agricultural extension advice (including climate information) via radio or mobile phone. However, they know that radio programmes covering agricultural issues offer only limited information. So, when needing to make farm-level decisions, farmers prefer to receive information via extension workers or meteorological services, as these channels help them to translate this information into usable formats.



In a village in Maharashtra, India, water availability is communicated to community members via local water budgets boards.

LESSON 2: Power relations, gender roles, gender equality, and resource availability strongly influence whether and how vulnerable communities access climate information.

Access to climate information varies significantly among and within different groups of people, and depends on access to technology – particularly in the case of mass-media approaches. The effectiveness of climate communication in communities is also heavily influenced by issues of power and gender, which affect whether and how community members can share their knowledge and take part in learning opportunities.

Beyond the use of traditional climate knowledge, pastoralists in some semi-arid areas are beginning to access external climate forecasts disseminated through radio by meteorological officers. As is customary in pastoralist culture, men and boys are often charged with the responsibility of moving with their animal herds in search of water and food, while women and children remain in the homestead where communication infrastructure is poor. As a result, men and boys are more likely than women and girls to have opportunities to hear radio broadcasts about climate forecasts.

Key example: A study [3] assessing the value of climate forecast information among pastoralists in southern Ethiopia and northern Kenya found that, although pastoralists commonly use radio to receive external forecasts, relatively few of them own radios. So, the ability to access external climate information is largely a function of material wealth. Another study [4] carried out among vulnerable farming communities in Senegal found that men and women differ in both their abilities to access climate information, and in their needs for different types of climate information; women needed forecasts on rainfall cessation, while men needed forecasts on the onset of the rainfall season. Therefore, gender-relevant information should be disseminated through accessible and gender-appropriate communication channels.

To further improve the relevance and usability of climate information we need to better understand the critical tensions between the effectiveness of large-scale mass communication, versus the need for situated knowledge within local contexts.

LESSON 3: **Communication approaches that foster dialogue and public engagement can both enhance the understanding of climate change and adaptation solutions and improve the likelihood of behavioural change.**

In the past, efforts to communicate climate information among vulnerable rural communities employed one-way dissemination approaches. Communities were rarely involved in the production of climate information or the design of specific adaptation tools or advice, and so the relevance of these at the local level was limited. More recently, communication approaches that foster dialogue, engagement and knowledge co-production with local communities are being encouraged. Key among these are mixed communication methods that integrate both technology-driven and people-centred approaches.

Key example: In the drought-prone and climate-sensitive region of Bundelkhand, India, a community radio programme is using a combined approach to fill the gaps in climate-change knowledge sharing[5]. Here, radio journalists play an intermediary role between communities, scientists and policy makers. First the journalists engage with communities and find out their needs and concerns, and then relay these local insights to scientists and policy makers.

The journalists also feed scientific information and policies back to the communities, making the content more accessible, broadcasting potential climate risks and popularising adaptation solutions. By encouraging dialogue and the co-production of knowledge, this approach supports collective learning among all stakeholders.

Key Recommendations for Research and Practice

- To best influence social or behavioural change, both scientific and cultural discourses on climate change and adaptation practices should be evaluated and understood.
- For communication efforts to be effective, it is important they begin with an understanding of local perceptions of climate change risks and adaptation responses. By talking to local communities and focussing on their needs, climate information can be co-generated, and can become more legitimate, usable and relevant. This in turn 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.
- Given the important role the media plays 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.
- Finally, 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.

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1 McGahey DJ & Lumosi C. In prep. Climate change communication for adaptation: mapping communication pathways in semi-arid regions to identify research priorities.

2 Churi AJ, Mlozi MRS, Tumbo SD, Casmir R. 2012. Understanding Farmers Information Communication Strategies for Managing Climate Risks in Rural Semi-Arid Areas, Tanzania, *International Journal of Information and Communication Technology Research* 2(11): 838-845.

3 Luseno K, McPeak JG, Barrett CB, Little PD, Gebru, G. 2003. Assessing the value of climate forecast information for pastoralists: Evidence from Southern Ethiopia and Northern Kenya, *World Development* 31(9): 1477–1494.

4 Tall A, Kristjanson P, Chaudhury M, McKune S, Zougmoré R. 2014. Who gets the Information? Gender, power and equity considerations in the design of climate services for farmers. CCAFS Working Paper No. 89. Copenhagen, Denmark: CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS).

5 Bisht H & Ahluwalia N. 2014. Community radios and climate change communication: Mapping grassroots experiences of the "Shubh Kal"Project in Bundelkhand, Central India. Retrieved from http://cdkn.org/wp-content/uploads/2012/11/Manuscript-Communityradios-and-climate-change-communication-Mapping-grassroos-experiences.pdf

ASSAR is a five-year, multi-country research project, which aims to deepen the understanding of the barriers and enablers for effective, medium-term adaptation within the dynamic and socially differentiated semi-arid regions of Africa and Asia. ASSAR will generate new knowledge about how adaptation processes – especially those linked to governance systems, policies and adaptation responses – can be modified or improved upon to achieve more widespread, equitable and sustained adaptation. We are particularly interested in understanding people's vulnerability and, in doing so, exploring the dynamic structural and relational aspects linking vulnerability to social difference, governance and ecosystem services.

For more information visit www.assaradapt.org or contact caroline.lumosi@intasave-caribsave.org

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