



Panel 7:

The roles of media and intermediaries in translating, sharing and advocating (sponsored by CCAA)

Chair: Patrick Luganda (NECJOGHA)

Jillian Dyszynski: Scaling up local knowledge using innovative online knowledge management tools

Admire Mare: Gender, climate change and indigenous knowledge systems: the case of Chivi peasant farmers

Charles Chikapa: The role of community radio in climate adaptation

Edith Abilogo: Emphasis on shaping media discourse on forests and adaptation to climate change in the Congo Basin

Panel Summary

To scale up and down research and policies, climate change knowledge needs to be shared between different actors and the general public. This session, chaired by Patrick Luganda, highlighted an array of mediums - from community radio to newspapers and the internet – that can be used to communicate and disseminate climate change knowledge. Positive stories were shared and challenges discussed, especially in relation to the sustainability of community radio stations and the online digital divide across Africa.

Online platform for knowledge sharing

Sharing information on climate adaptation is essential to the work we do. Currently the World Wide Web does not provide a space where organisations and specialists can collectively come together to contribute and exchange content. Jillian Dyszynski from the [Stockholm Environment Institute](#) presented how [WEADAPT](#) has been developed to fill this online void.

WEADAPT is using spatial and geo-referencing as a way of visually and interactively presenting who is doing what and where using Google maps. A WEADAPT video narrated by Nobel laureate Wangari Mathaai showed how video and Google mapping can also be interlinked. Jillian also noted that there is a low bandwidth options for those who do not have good internet services.

Newspapers in South Africa and Zimbabwe: are they covering climate change?

In the mass media sector in Africa, the press play numerous roles such as ‘midwives’, intermediaries, translators, environmental scanners, information disseminators, among others. Admire Mare from [Rhodes University](#), South Africa presented the trends and policies in selective newspapers covering climate change.

The media has an indispensable role to play in behavioural change intervention, but what role do the media play in influencing climate change action? One issue highlighted was accessibility – who gets to speak in the newspapers?

Examples of South Africa and Zimbabwe newspapers were presented; some of the challenges with communicating useful climate stories include: newspapers are now businesses – papers need to sell therefore sensationalist headlines are needed, articles are too official with a high political agenda, high use of jargon, over reliance of government sources with limited perspectives from the ground. Women’s voices are rarely cited.

As a way forward, Admire recommended re-exploring oral media, the use and connection to social media tools, as well providing climate science training for science journalists.

Role of community radio in climate change – experiences from Malawi

With 90% of Malawian households engaged in agriculture, community radio can be used as a catalyst in communicating food security issues caused by climate change. Charles Chikapa noted

that a 1997 UNESCO study estimated that 170 million Africans owned a radio; radio set ownership is expected to increase by at least 4 % per year. Radio is still considered to be a vital medium of information and the internet, a luxury for many.

Farm Radio International implemented [the African Farm Radio Research Initiative \(AFPRI\)](#) from 2007, which is aimed at gathering, sharing and implementing best practises for using radio-based communication strategies to enhance food security in Africa. The [Dzimwe Community Radio](#) station, Malawi's first Community radio station is part of this project.

The AFRI campaign provides advice to farmers to improve food security in the country; the radio producers believe that the campaign has improved food security and people's health as this station provides a space for communities to voice problems and find solutions that will improve their lives and livelihoods. The current focus is on maize, but the techniques that the staff have learnt and used could be extended to other crops.

Shaping media discourse on forest and climate adaptation in the Congo basin

Edith Abilongo, representing [CoFCCA](#) – an IDRC project focused on forests and adaptation to climate change in the Congo Basin - discussed why in the context of communication, it is important to develop capacity building activities towards media in the region. She noted that that there is very little space allocated to environmental issues in the media in the region.

In order to build climate change discussion and dialogue in the region, CoFCCA has:

1. Developed a Media-Science-Policy dialogue with three main actors: politicians, scientists and journalists. This dialogue will be strengthened through workshops, training and field visits.
2. Started providing scholarship schemes for Master programmes in communication schools/universities to enhance communication specialists in this sector.

Q&A Discussion

Climate change knowledge can now be communicated through an array of mediums - from community radio to newspapers and the internet. Some of the interesting questions asked were around who shapes the discourse within the media and issues of access, especially with the use of the internet. Another point made was not only the lack of journalists within the region who are well informed about the science of climate change, but also the need for scientists to understand how they can communicate their messages in more accessible language to a wider audience. One participant noted that a stronger relationship and trust needs to be built between the media, scientific community and policy makers.

Jillian Dyszynski

Scaling up local knowledge using innovative online knowledge management tools

One of the major challenges facing the adaptation community is identifying examples of adaptation practice and research methods that can be scaled up and learned from. Finding and connecting with others working on similar projects or geographical areas helps promote collaborative efforts and knowledge sharing, and avails research results for effective decisions and policies. Moreover, this highlights the critical need for informed adaptation approaches and investment decisions.

This paper will discuss developments in facilitating knowledge exchange using the online platform, weADAPT.org, featuring Google Earth spatial tools coupled with narrative 'tours' and sophisticated semantic search tools to support climate adaptation initiatives globally. The knowledge platform is under development by the Stockholm Environment Institute (SEI) Oxford

Office and aims to help scale local experience for regional and international application. This online 'open space' allows users to access credible, high quality information on adaptation issues and to share experiences and lessons learnt with the climate adaptation community. It is designed to facilitate learning, exchange, collaboration, synthesis and knowledge integration, to build a professional community of practice on adaptation issues, while developing guidance for adaptation planning and decision-making.

There are many hurdles to overcome in creating such a space such as how to break down the barriers that prevent people from sharing information. This can be resolved by increasing trust in the platform and its objectives, which in turn can only be achieved by addressing the very particular concerns of different contributing communities. Making the benefits clear – the ability to learn from different knowledge networks, the increase of knowledge sharing capacity, improving potential collaborations, building on existing research and avoiding replication – must be balanced by creating a sense of collective ownership of the resource with full attribution of content.

Two projects are discussed to illustrate application of weADAPT.org to improve trust, knowledge sharing, dissemination and integration. The first example is the 2009 collaborative project between SEI and Google.org, covering issues of deforestation and local livelihoods in Kenya, narrated by Professor Wangari Maathai in an 'Adaptation Tour'. The second example illustrates how use of geographical place marks within the weADAPT 'Adaptation Layer' using Google

Earth can link adaptation work across different geographical areas. The theme of adaptation across agricultural systems in Malawi, Rwanda and Tanzania is explored based on an innovative adaptation economics methodology developed by the International Institute for Environment and Development, SEI and the Global Climate Adaptation Partnership (GCAP). Both illustrative examples demonstrate ways to make information even more accessible, the opportunities to share more inclusive and broadening the types of information that are available, e.g. from indigenous knowledge and coping strategies to downscaled climate data.

Kenyan narratives of adaptation - Increasing Access to Information on Climate Adaptation, 2009

During a stakeholder workshop in Nairobi, it emerged that creating narratives on different aspects of adaptation may be a powerful way to communicate climate adaptation work that is ongoing and to share lessons learnt. To achieve this, in the Kenyan context, further in-depth interviews were

conducted after the workshop with research groups, NGOs, donors and other key stakeholders, to establish some key priority messages which could be communicated in narrative form.

In Kenya, the priority messages that emerged were around water, the impact of deforestation and the need for livelihood diversification. This tour includes spatial layers of historical temperature and precipitation trends across Kenya, with screenshots from the Climate Change Explorer tool showing downscaled station level GCM data, illuminating the range of uncertainty produced by the different projections. It also includes an animation of deforestation in the Mau Forest complex.

Based on this experience, we have now developed many different options available for users to present their work through the new weADAPT/Google Earth interface and all of them are relatively simple, yet powerful tools for communication and sharing lessons learnt.

Costing and Planning Agriculture's Adaptation to Climate Change: IIED, SEI, GCAP, 2011

This DFID-supported research project addresses the planning and costing aspects of adaptation across five different agricultural systems, taking into account that there is limited information, and uncertainty on future climates. Using the local level as the entry point for empirical analysis, the project considers the decision-making framework of adaptation stakeholders under uncertainty, considering the roles of different stakeholders at the local (community), meso (district) and national levels across five case study countries: Bangladesh, Malawi, Nepal, Rwanda and Tanzania. Results are used to build adaptation "signatures" that illustrate institutional and temporal adaptation pathways. Cross-country analyses of these pathways provide a global perspective to adaptation planning and costs in different agricultural systems. Downscaled climatologies for case study sites in each of the countries are also applied to consider envelopes of possible change to help guide future planning.

For the purpose of the AfricaAdapt Symposium, the three East African case studies are used to illustrate how adaptation methods and findings from local case studies can inform decision making at national levels. This demonstrates how experiences in local coping strategies for specific cropping systems, financial investments in adaptation, and strategies to enhance district and national policy making can be shared. A spatial demonstration of this is being developed using Google Earth place marks within the Adaptation Layer of weADAPT.org.

A key outcome of both the narrative Kenya tour and agriculture project work is addressing the critical need of sharing experiences in adaptation research that support national and international investments - particularly in Africa. This recognises that adaptation finance requires channelling adaptation resources at different levels of input, from the individual level, promoting autonomous adaptation to strategic and planned adaptation centres, such as research and policy making institutions. Stakeholder engagement is key to adaptation planning and policy making, and tools such as weADAPT platform endeavor to support this learning process.

Admire Mare

Climate change, Mediation and Mediatisation in Southern Africa: Towards climate and environmental journalism.

By Admire Mare

admiremare@gmail.com or admiremare@yahoo.co.uk

AfrikaAdapt Symposium, Addis Ababa, Ethiopia

9-11 March 2011

Extended Abstract

Climate change has become an issue of concern for media in recent years. Given the primacy of mediation and mediatisation in modern societies, this paper argues that development journalism which treats audiences as citizens, while prioritising public listening, and deliberative citizenry on climate change discourses is the missing link in current advocacy strategies. This paper demonstrates that representations and news discourses of climate change in selected South African and Zimbabwean newspapers have largely been framed within the strictures of the global scientific hegemony which gives primacy to alarmism, technocratic jargon, and officialdom. Such reportage has thus far been instrumental in the creation, reproduction and circulation of top-down approaches to climate change adaptation which obfuscates the role of indigenous knowledge systems and constricts voices of the poor in local debates. It also argues that advocacy and translation role of media in Africa is being constrained by the dearth of science journalism, news commodification, media commercialisation, and urban bias of newsrooms. In a context where climate change is threatening to wipe off livelihoods of billions of people, the media is crucial for the dissemination of truthful information on weather forecasts and disaster warning to the public within the climate information cycle. It argues that both traditional and citizen centric media are important cogs in the climate information cycle as information disseminators, mobilisers, translators, environmental scanners, platforms for debate and fora for intercultural learning. In short, the media has a role to restore the 'voice' to those threatened by climatic changes. It makes a case for citizen journalism as an antidote to the publisher-centric agenda setting of climate change debates. It also calls for the introduction of climate change journalism courses as part of curricula in order to create a critical mass of well trained science journalists instrumental in mobilising and sensitizing their communities. This paper argues for a paradigm shift asserting that the time is ripe for the discipline at journalism training schools in Africa to welcome a new baby in the family of journalism: climate and environmental journalism. Whereas politics, sports, economics, entertainment and health journalism have received considerable attention in most journalism curricula in recent years, the introduction of climate and environmental journalism courses would permit better understanding of the sustainable development challenges as well as enable journalists to better respond, from an informed position, to the challenges of development in such areas as environmental degradation, climate change mitigation, adaptation and disaster warning among others.

Introduction and Background to the study

Climate change is being felt around the world through the increased severity and frequency of climatic trends and extreme events that have may have critical consequences for the way populations achieve and sustain development. It has wrecked havoc in Africa, particularly low lying areas in Mozambique, South Africa and Zimbabwe. Not to be outdone have been climate-related natural disasters, which have left millions of people reliant on agricultural produce on the brink of starvation. Zimbabwe has experienced a spate of climate-related natural disasters especially Cyclone Eline, Cyclone Japhet and flooding in

Muzarabani and Lower Zambezi areas. Disasters of note include, Cyclone Eline which occurred in February 2000 causing severe flooding; the drought in 1991-1992 which is described as the worst in living memory coming at a time when the rising unemployment and increasing user fees associated with Zimbabwe's implementation of the Economic Structural Adjustment Programme (ESAP) had increased the vulnerability of the poor (Marquette 1997).

South Africa has not been spared, with unprecedented flooding being experienced in many areas across the country (Tigere, 2010). Since 2008, South Africa has been dealing with perennial flooding especially in the Northern Cape, Western Cape, Gauteng and KwaZulu-Natal. Msengana-Ndlela (2008) posits that by August 2008, more than 4 000 dwellings and 18 000 people had been affected by flooding in the Western Cape, while the impacts in KwaZulu-Natal prompted the declaration of a state of disaster. Sudden onset natural disasters, such as devastating floods, violent hailstorms, heavy snowfalls and gale-force winds are a regular occurrence in South Africa (South Africa, 2007:15). However, despite this bleak future which media reports highlights every year, climate change mediation in Southern Africa remains sporadic, event-based, official-centred and jargon-laden. Such kind of communicating climate change mystifies the whole discourse and flags 'experts' as modernisers who are expected to act as 'change agents' in communities dogged by ignorance and docility. Packaging climate related discourses within the strictures of modernisation theory is not something new to development communication. In fact, previous development (economic, political and social) interventions have rode on the back of this grand theory whose basic assumptions are anti-indigenous knowledge systems. It is no wonder that two newspapers analysed in Zimbabwe and South Africa, rarely quote ordinary citizens who have stocks of knowledge of adaptation and mitigation at a local level.

Since the start of the industrial revolution in Europe and the catch up race by the East Asian Tigers, the world has achieved progress in many fields at the expense of sustainable development. Climate change is an unintended consequence of industrial and technological revolutions which have spawned environmental pollution. At the same time, these revolutions have polluted nature, environments, human persons, their living places, and markets. This paper contends that climate change is caused by human beings in their quest to conquer nature and amass wealth. It is noteworthy to highlight that not all people pollute the environment at the same magnitude. Some people pollute more than others, for instance those who own the means of production are likely to pollute more compared to workers. The irony of climate change is that developed countries which are the worst polluters of the environment are far less likely to be affected by it as compared to developing countries (which are still playing the catch up game). Thus climate change follows cracks and crevices in terms of geo-economic stratification. In the same vein, women are more likely to be affected by climate change compared to men due to their over-reliance on the environment. Social stratification variables such as gender, class, race, ethnicity, caste, and age are some of the cracks and crevices that climate change impacts have tended to follow despite differentiated contributions towards

environmental pollution. Thus any attempt to influence human behaviour on climate change thus far has been curtailed by refusal by the rich (developed countries, multinational companies, entrepreneurs etc.) to cut down on their carbon emissions. On the other hand, the poor whose carbon emissions are negligible are on the receiving end. Today the burning question is ‘whether the progress we have achieved can be used to create greater welfare for all in every field or whether they are simply techniques to solve one problem, creating another bigger problem, and in the process make a few people rich and many others poor’ (Pope Benedict XVI). Research shows that melting glaciers, displaced populations seeking refuge after floods, crops lost during over extensive periods of drought, or entire villages devastated by the implacable force of cyclones and hurricanes, are just some of the stories emerging from different corners of the planet; in particular from the poorest, most vulnerable countries of the world. Emerging evidence also indicates that both acute (i.e. extreme weather events) and chronic climate effects (i.e. longer-term changes in the environment) can have serious developmental effects that hit particularly hard those countries that are already experiencing the hardships of poverty and marginalization (IPCC, 2007).

Media, Mediatiation and Climate Change

“Changing attitudes towards climate change is not like selling a particular brand of soap – it’s like convincing someone to use soap in the first place.”

What role do the media play in influencing personal, local and national action to address climate change? How does the media cover climate change, and are there any discernible changes in climate news coverage? How do climate change stories come to be reported, and who gets cited as legitimate sources in those stories? What influence do the media play in forming public opinion? These and other related questions have become pertinent in the era of climate change especially in Africa. Although the actual date when climate change and global warming became newsworthy issues is difficult to pin down, it is believed that coverage of climate change began in the 1930s. The coverage remained sparse and lethargic until the 1950s when the media began to zero-in on human contributions to climate change. It was until the mid-1980s when the three media-science-policy spheres collided (Boykoff and Roberts, 2007). Since then media coverage of climate change science and policy increased dramatically especially in Europe and America. However, the role of the media in communicating climate change has often been framed within the development communication framework which sees the media as ‘modernisers’, ‘development communicators’ and ‘participatory forums’. Mass media encapsulates a broad church of production and consumption media practices ranging from television, print, radio, internet and social media. Mass media have been defined as ‘the publishers, editors, journalists and others who constitute the communications industry and profession, and who disseminate information, largely through newspapers, magazines, television, radio and the internet’ (Boykoff and Roberts, 2007). Media representations encompass a wide range of activities and modes of communication. From performance art, plays, and poetry to news and debate, media portrayals have drawn on narratives, arguments, allusions and reports to communicate various facets of the issue (Boykoff and Roberts, 2007: 2).

Depending on one's theoretical orientation, the media has a variety of roles it can play with the context of climate change. For instance, Boykoff and Roberts (2007) posit that mass media coverage has proven to be a key contributor – among a number of factors – that have shaped and affected science and policy discourse as well as public understanding and action. Weingart et al, (2000) contends that mass media representational practices have broadly affected translations between science and policy and have shaped perceptions of various issues of environment, technology and risk. Given its social embeddedness in people's everyday lives, Bennett (2002, 10) sees the mass media influence as far reaching: "Few things are as much a part of our lives as the news...it has become a sort of instant historical record of the pace, progress, problems, and hopes of society". In South Africa, Leonie Joubert has written two books on climate change: *Scorched: South Africa's changing climate* and *Boiling Point: People in a changing climate*. In Africa, and more specifically in rural areas, radio has been a principle medium through which climate change news is communicated (Luganda, 2005). Radio is often referred to as Africa's medium' due to its reach and social embeddedness in ordinary people's everyday lives and its ability to break the barrier of illiteracy through the use of local languages in their simplest forms, also reach different people without discrimination and the receivers or listeners require less intellectual exertion to understand the message. The radio has also been described as the most 'natural press' for a largely non-literate audience in Africa.

The normative role of media as constructed within the Habermasian public sphere theory sees it as platform for rational critical debate and formation of public opinion on issues of national interest. The public sphere is conceptualised as an arena within which debate occurs, the generation of ideas, shared knowledge and the construction of opinion that occurs when people assemble and discuss (Hartley: 2002:191). Habermas sees the public sphere as that of a body of 'private persons' assembled to discuss matters of public concern or common interest'. He idealises the liberal bourgeoisie public sphere as a place where citizens come together to engage in rational discussion on issues of common concern and where differences of identity would be put to hold so that true equality might prevail in reaching a consensus. However, scholars such as Fraser (1992:122) have critiqued Habermas for being elitist and exclusionary of marginalised groups such as women, youths and ethnic minorities. Fraser thus suggests that creating possibilities for alternative public spheres to exist and thrive is a better way to promote democratic participation and open public debate. Thus, Fraser's conception of the alternative public sphere has resonances with post-modern understanding of identity, that there is no singular (over-arching) identity and that one's identity is one of many possible identities to which the different public spheres may speak. In the words of Fraser (1992: 139) "the people who previously have been denied access in the mainstream public sphere ...manage to find in the discourses of the alternative public spheres representations of their interests, life problems, and anxieties that are close enough to resonate with their own lived self-representations, identities, and feelings". The media is a crucial public sphere where public opinion on climate change is formed and reconfigured. However, not everyone has access to the media, especially newspapers where through framing and representation, journalists deliberately choose certain 'voices' to speak on behalf of others. These voices tend to be male centric, educated elite, middle class, powerful and rich thereby sidelining

other voices to the margins of the public discourse on climate change. Journalists have been found to misrepresent the scientific consensus on climate change by deploying ‘false balance’ (Boykoff 2007). However, the International Broadcasting Trust (2010) believes that the Climategate has prompted a return to framing climate news in terms of a polarised debate between equal parties.

In modern day societies, the media is considered as an indispensable source of information and the main factor shaping people's awareness and concern in relation to climate change and therefore have an important role in setting the public agenda. The news media is touted as a civic forum encouraging pluralistic debate about public affairs, as a watchdog guarding against the abuse of power and as a mobilizing agent encouraging public learning and participation in the political process. As a key forum for the production, reproduction, and transformation of the meaning of public issues, the media influence understandings of risks, responsibilities, as well as the functioning of democratic politics (Carvalho, 2010). Studies have also found that the public learns a large amount about science through consuming mass media news (Wilson 1995). Mass media plays important roles – both explicitly and implicitly – in terms of conveying information, stimulating thought and discussion, and in forming and developing ideational behaviour. Due to its educational potential, the media sector is often seen as having a special responsibility in promoting development communication, disaster warning and disseminating information to the most at-risk communities in the context of climate change. Even so, in the era of digital or social media, the media sector has acquired extraordinary potential which needs to be harnessed in communicating climate change. There is no denying the contribution they can make to the diffusion of news, to the knowledge of facts and to the dissemination of information.

There is considerable research published on media coverage of climate change in many developed countries especially USA and UK. For instance, Boykoff and Roberts (2007) have provided a groundbreaking study on how mass media coverage has shaped discourse and action – in complex, dynamic and non-linear ways – at the interface of climate science and policy. Their study demonstrates how types of media communications, as well as ownership and structure (political economics) shape these processes. Building upon the framework of Carvalho and Burgess (2005), they refer the steps in the media production and consumption process as the ‘three phases’ of news production, public discourse, and media consumption, and personal engagement with climate change. This leads Boykoff and Roberts (2007) to conclude that ‘large-scale economic and political factors shape the production of news, as do micro-scale issues like the norms and needs of journalists, editors, and producers. The study also shows that climate news stories compete with other issues for public attention and the budget priorities of public officials. At the level of consumption, Boykoff and Roberts (2007) demonstrates the difficulties encountered in reporting uncertainty in climate science, and the influential role of climate ‘skeptics’ in paralyzing action. Studies have also been done on climate change impact, mitigation and vulnerability in Africa but very little on media coverage.

Despite the severity of climate-related impacts on economies and livelihoods, climate change mediation remains absent from some African newspapers whether daily, weekly or monthly. This silence on climate change in the print media is worrying given that despite Africa's position as the least developed continent, estimates by climatologists point to the fact that it will be one of the hardest hit areas in the coming decades. Studies on how the mass media have covered a range of environmental issues have been negligible to say the least. For instance, Luganda (2005), Chagutah (2006, 2010), Okigbo (1995) and Anderson (1997) are some of the few scholars to have examined the intersection of mass media, climate change and sustainable development. This is despite revelations by Mutere (1991) in (Boafo, 1991) that,

“... Environmental issues constitute a relatively marginal concern in most African newspapers, radio and television news, and current affairs programs. Much more attention is given to national politics, labour disputes, the arts, and business.”

This paper explores the coverage of climate change in two South African and Zimbabwean weekly newspapers paying particular attention to media representations of the climate change discourses, who is given voice in media reports, and how different news actors are represented, the framing of the modern knowledge systems vs. indigenous knowledge systems debate and finally documenting the manifest and latent features of climate news stories. It argues that most climate news stories are pitched within the global scientific hegemony which gives prominence to 'experts' and change agents which 'construct particular 'subject positions' for individuals and cultivate dispositions to action or inaction' (Carvalho, 2010). It also argues that advocacy and translation role of media in Africa is being constrained by the dearth of science journalism, news commodification, media commercialisation, and urban bias of newsrooms. In a context where climate change is threatening to wipe off livelihoods of billions of people, the media is crucial for the dissemination of truthful information on weather forecasts and disaster warning to the public within the climate information cycle. It argues that both traditional and citizen centric media are important cogs in the climate information cycle as information disseminators, mobilisers, translators, environmental scanners, platforms for debate and fora for intercultural learning. The paper makes a clarion call that the media must avoid becoming spokespersons for 'economic materialism' or 'global capitalism' which is responsible for huge amounts of carbon emissions. Instead, they must contribute to making known the truth about climate change, and defending it against those who tend to deny or destroy it.

Study Population: The Weekly Press in South Africa and Zimbabwe

In terms of the study population, it was decided that the weekly press offered a fruitful space to explore the coverage of climate change because of its in-depth coverage of issues, as there is greater space for investigative journalism, 'which is critical for comprehensive environmental news coverage, and more time during which the reporter can gather information for the story' (Chagutah, 2010). There is also a greater likelihood that journalists at a weekly can go out of their immediate surroundings to cover stories as they are not constrained by the 24-Hour cycle in operation at daily papers. The *Sunday Mail* is a broadsheet owned by the Zimbabwe Newspapers Group in which the Government of Zimbabwe is a majority

shareholder while *The Mail and Guardian* is a tabloid owned by Alpha Media, a private company run by Trevor Ncube. The former is based in Zimbabwe while the latter is a South African publication owned by a Zimbabwean media magnate. Both newspapers are renowned for thought provoking analysis of politics, economics, environmental and sport news. Moreover, in their respective media markets, both newspapers are considered leaders. For instance, the Mail and Guardian is considered one of the best investigative newspapers in Southern Africa. Both newspapers cover climate change issues in different sections i.e. news, feature, analysis and comment. In terms of readership, *the Sunday Mail* has consistently maintained its position as the leading national weekly, commanding 39 percent of the urban readership, according to figures from the 2010 Zimbabwe All Media Products Survey. On the other hand, The Mail & Guardian's circulation ranges between 25,000 and 40,000 per edition. It also operates a good functional online version. It is clearly a good example of a newspaper that targets the elites of South Africa, targeting upper and middle class income earners (Tagbo, 2010). The choice of these two papers was also motivated by the fact that such differences in ownership influence editorial content, thereby allowing for far reaching comparison.

METHODOLOGY

The research was based on a primary set of data generated from internet picks of online versions of the climate change stories in the *Sunday Mail* and *Mail Guardian* newspapers and organized through qualitative content analysis. Qualitative content analysis, which is often used in a wide range of analytic methods such as discourse analysis (van Dijk 1993), is a method that combines the systematic analysis of large bodies of text as in quantitative content analysis, but with a more holistic approach to the text (Dhoest 2004:395). Qualitative content analysis involves exploring the meanings that are embedded in the representations as opposed to looking at the frequency of particular themes as a reflection of particular phenomena. It tends to focus on the process of meaning production at the level of the text whilst bearing the wider socio-cultural context within which they are made to mean (see Wigston 2001; van Dijk 1993). In order to get articles for qualitative content analysis, I decided to monitor the content on 'climate change' in South Africa and Zimbabwe by relying on www.sundaymail.co.zw and www.mg.co.za websites. I was interested in collecting only climate change news stories over the last 12 months (January to December 2010). This enabled samples of news stories to be collected for analysis and in-depth reading.

Theoretical Framework: Framing and Representations

In order to make sense of mediation and mediatisation of climate change discourses in Zimbabwe and South African newspapers, this paper deployed two metaphorical constructs –framing and representation. Framing is the manner in which an issue is presented and this influences the way in which issues or problems can be understood. Entman (1993: 52) defines, “framing essentially involves selection and salience. To frame is to select some aspects of a perceived reality and make them more salient in a communicating text, in such a way as to promote a particular problem definition...” Therefore, the construction of meaning and discourse derive through combined structural and agential components. Framing is a process, and an inherent part of cognition whereby content is constructed – in the form of

issues, events and information – to order, organize and regulate everyday life (Goffman, 1974). It can be defined as the ways in which elements of discourse are assembled that then privilege certain interpretations and understandings over others. Framing permeates all facets of interactions between science, policy, media and the public. The process of media framing involves an inevitable series of choices to cover certain events within a larger current of dynamic activities. These events are then converted into news stories. Asymmetrical influences also feed back into these social relationships and further shape emergent frames of ‘news’, knowledge and discourse (Boykoff and Roberts, 2007).

The media do not merely reflect the reality through news reports; they also recreate and reshape it through signifying practices and representation (Ndlela, 2007). Hall (1997) approaches representation as a medium or proves through which meaning, associations and values are socially constructed and reified by people in a shared culture. Thus to Hall (1997), ‘Representation is a very different notion from that of reflection. It implies the active work of selecting, and presenting, of structuring and shaping: not merely the transmitting of already existing meaning, but the more active labour of making things mean’. Therefore, representation involves understanding how language and systems of knowledge production work together to produce and circulate meaning. Stereotyping, simplification and generalisation are some of the strategies used by journalists to make things mean. In terms of stereotyping, this is done through processes of selection (choose one aspect over the other), magnification (inflates it into the defining characteristics) and reduction (establish it as the most recognisable image). It is noteworthy to emphasise that media representations of climate change have the potential to ‘reduce, shrink, condense, and select/ reject aspects of intricate social relations in order to represent them as fixed, natural, obvious and ready to consume’ (Ndlela, 2007). The prime device through which representations of climate change have been circulated is through alarmism, amplification and simplification. Stereotyping functions as shorthand through which the media simplifies issues. As Medhurst has noted, ‘since there is never enough time or space to describe people in all the rich complexity that their individuality deserves, short-cuts have to be taken, comparisons made, generalisation risked, labels attached (Medhurst 2002, 315).

The very process of selection serves not only to stereotype but also to exclude many features and ways of understanding climate change in Southern Africa. Alarmistic tendencies are some of the main features or dimensions of events which are likely to be associated with impacts of climate change in news reports. Consequently poverty, malnourishment, underdevelopment and negative coping mechanisms associated with climate change are likely to be reported compared to opportunities that low carbon economies are likely to amass due the changed global business environment. Thus there is tendency within newspapers in Zimbabwe and South Africa to represent ‘climate change’ as a marauding juggernaut caused by invincible forces. For instance, ‘*You can’t afford to be slow in an emergency. Act now for the planet,*’ is the World Wildlife Fund’s urgent call to reduce carbon emissions. Such magnification of weather related changes constructs climate change as an out of this world monster, which can only be halted by anointed experts.

The problem of flagging the alarmist card is that it has the unintended consequences of demobilising people through inculcating feelings of isolation, hopelessness, and powerlessness.

Reading through the news stories, one discerns an underlying trend towards generalisation of climate change impacts. Missing from most media reports on climate change are nuanced analysis of cracks and crevices in societies. As Boyd-Barret (2002, 57) has argued, these agencies, while they operate globally, gathering news independently from most countries of the world, and selling it to clients in most countries, they have a strong European identity. These agencies disseminate news scripts that have been subjected to rewriting by the editors who control the channels through which the news are disseminated. Thus, media coverage of climate change (adaptation and mitigation) is not a simple collection of news articles and clips produced by journalists and producers; rather, representations signify key frames derived through complex and non-linear relationships between scientists, policy actors and the public, often mediated by news stories (Boykoff and Roberts, 2007).

Media Representations of Climate Change: The Sunday Mail vs. Mail and Guardian

The mediation of the climate change story in Southern Africa is still lethargic and spasmodic. Leonie Joubert is on record as describing environmental journalists in South Africa as ‘missing the story of the century’. This is because the media reportage does not seem to reflect the urgency of the issue at hand. In fact conservative estimates note that environmental reporting constitutes one percent of the total reporting in South African media (Media Tenor South Africa Report, 2010). It adds that only half of this percent is spent on climate change. This reinforces Tagbo (2010)’s conclusion that ‘the quantity of climate change coverage in African media is disproportionate to level of threat it poses to the continent’. It revolves around speeches by government officials, workshops, public lectures and international conferences. Most of stories analysed were written just before and after big international conferences such as COP 16, which shows that climate news are mostly event based rather than fieldwork generated. The coverage of climate change is still negative, because it is event-based, official-centred, centres of crises or non-compliance to regulations. Even images which often accompany climate change stories tend to be gory and disaster-centred meant to shock readers. This confirms Chagutah (2010)’s assertion that much of environmental news coverage in the Zimbabwean press is event-centered hard news, falling within the related frames of risk, uncertainty, fear, outrage, and crisis. Despite, the much publicised COP conferences in Bali, Copenhagen and Cancun, the way media reports climate change and global warming hasn’t changed much reflecting the inbuilt biases towards other journalistic genres.

The coverage of climate change stories by the two newspapers studied confirms most research that has been done which seem to suggest that the environment beat is still considered a ‘lower order’ genre in African newsrooms. Thus, climate change stories rarely make it to the front page unless the President or Head of State is attending an international conference such as the United Nations or COP meetings. In the case of *The Sunday Mail*, climate news becomes front page stories when they are accompanied by speeches from the Vice-President or President. The *Mail and Guardian*, on the other hand, reports extensively on

politics and scientific debates surrounding COP meetings. However, it is clear from their stories that they position themselves within the global scientific hegemony which is pro-neo-liberal economics. Both newspapers seem to be engrossed with ‘adaptation’, ‘mitigation’ and climate change policies. Only three out of 30 stories focuses on indigenous knowledge systems and their role in climate change adaptation. The *Mail and Guardian* also covered at length the international relations and political implications of the Kyoto Protocol and the need for a fair deal especially for developing nations.

The Mail and Guardian dealt with science, policy and climate change at an international level and gave little South African context. Their stories tended to take a pan-African and international focus especially focusing on AL Gore and his climate change gospel, Stiglitz’s views on climate change and the global implications of inaction in the face of climate change. Only one story looked at the local impacts of climate change on women farmers. On two occasions, the Mail and Guardian framed the climate change stories as a political issue pitting the developed countries against developing countries. There is somehow silence on ESKOM’s ambitious electricity generating coal project in Kolberg in Cape Town. Due to the urban bias of most newsrooms in South Africa, most stories of climate change in the Mail and Guardian were sourced from foreign news agencies such as Reuters and AFP with little or no effort to domesticate these stories to speak to their readers’ every-day lives. In contrast, The *Sunday Mail* gave more attention to Zimbabwean issues, their climate stories dealt with impacts of climate change, adaptation strategies and mitigation efforts by the government and non-governmental organisations. For instance, their stories tended to zero-in on the threats posed by climate change on bio-diversity, eco-tourism, crop production and water harvesting techniques. Moreover, although the newspaper is based in Harare, there is evidence of field visits once in a while to interview small scale farmers on climate change adaptation strategies. For instance, on three instances, reporters visited communal farmers in Goromonzi, Sanyati and Mutare to ascertain the extent of climate change.

Legitimate Sources: Whose voice is it anyway?

It is important to point out that the media is a ‘public sphere’ where certain voices are allowed to speak on behalf of others. Not everyone has an equal say on the topic of the day. The media has in-built gatekeepers and filters in place which legitimates and confers ‘spokesperson statuses’ to some citizens over others. Fraser (1995)’s critique of the Habermasian public sphere is predicated on the same argument that the press sidelines voices of those existing at the margins of society. Research to date also shows that ‘science journalists are overly-reliant on single scientific sources, going against the journalistic norm of testing the claims of news sources’ (Conrad, 1999). Swimming against the global scientific consensus on climate change seems to be against the journalistic norm. Out of the 30 stories analysed in this study, only four stories allowed ordinary peoples’ voices to be heard through the media. This apparent failure by the press to articulate ordinary citizens’ aspirations and frustrations on climate change has unintended consequences of generating feelings of alienation, inaction and disengagement from development interventions. In both papers, most climate stories were sourced international and local conferences, workshops, public lectures,

congresses and press conferences. Thus climate change stories are tied to events more than fieldwork generated. As a result, legitimate sources tend to be those in authority or experts invited to speak at these gatherings. For instance, in the case of *The Sunday Mail*, most sources quoted were either climate scientist or political figures. President Robert Mugabe, Vice-President Joyce Mujuru, VP John Nkomo, Governor Angela Masuku are some of the political figures whose names figured prominently in most climate change stories. On the other hand, the Mail and Guardian relied more on experts affiliated to research institutions and universities. These include Dorah Lebelo (a gender and climate change expert), Joseph Stiglitz (an economist), Martyn Davies, and Louise Naude' (climate change officer-WWW). In some instances, political figures such as VP Kgalema Monthlante, Mr Xi Jinping were quoted. It is me be underscored that climate change remains a male-centric issue judging from the voice which is privileged to speak in the two newspapers studied. Women only featured when the story had a gender slant to it, for instance in the following stories: 'Climate Change Reality Dawns on Rural Farmers' and 'climate-change policy ignores women farmers'. Paradoxically, research shows that women are likely to be affected by climate change as they rely on environment for survival compared to men. However, their voice is non-existent when it comes to media coverage of mitigation and adaptation aspects of climate change.

The climate news framing was virtually uniform in the two newspapers, especially on 'adaptation' and 'mitigation' aspects of climate change. Compared to the *Mail and Guardian*, the *Sunday Mail* has fewer stories on climate change in 2010. This may be explained by the fact that the former newspaper updates its online content more regularly than the latter. The framing of the news sometimes depicts the issue of climate change as a concern only for the elites and those in government (Tagbo, 2007). Only four stories out of a total of 30 stories had a human angle to them. In the case of the Mail and Guardian, it was presented as if the government holds the keys to dealing with climate change. Faith was put in international conferences at the expense of localised adaptation strategies. For instance, the following headline underscores this belief in international solutions: 'No nation can solve climate change alone'. Such kind of reportage inculcates irresponsible behaviour amongst citizens who end up believing that the only solution to climate change lies in the ratification of a new climate deal where technology transfer would act as the 'magic wand'. It is clear the media in Southern Africa, instead of analysing the implications of more coal generated sub-stations being mooted in Zimbabwe and South Africa, are missing the climate change story. There is a belief that seems to pervade most newsrooms that climate change stories are found at conferences and workshops.

Jargon in climate news

Specialised reporting such as business and environmental reporting have come under a barrage of criticism for using big words which alienates them from readers. Climate news is no exception. All events reported in the media have to go through some kind of gate keeping process, whereby editors and journalists decide whether a story is reported and followed up against other competing stories. In the two newspapers analysed, although some stories based on fieldwork had little jargon compared to stories sourced from

'experts' such as climatologists, meteorologists and scientists. For instance, the *Mail and Guardian* stories often made mention of the concepts without unpacking them: 'carbon emissions', 'a low carbon economy', green, green economics, green sectors, green technology, a just and sustainable policy, market-based climate change adaptation solutions, genetic modification, people-centred solutions, primitive hocus-pocus, human-caused climate change, carbon neutral, greenhouse gas reporting, green bank, emission reduction, emission control, underground coal gasification, hydrogen economy and spreading the green gospel. There is need to tone down on scientific jargon surrounding the climate change discourse in order to reach a wide variety of audiences affected by climate change especially those in rural areas. On the other hand, *The Sunday Mail* constantly deploys concepts such as 'environmentally sound technologies', 'global warming', hydrants, conservation farming, carbon tax, carbon trading, carbon emission targets, indigenous seeds, and new climate change deal. The use of jargon serves the purpose of alienating readers instead of informing them. In the context of Africa, where climate change is expected to have 'disastrous', it is important to educate and inform rather than mystify and alienate.

Framing the climate change crisis

It is interesting to note despite their normative function as civic platforms, 'newspapers are commercial products and the stories they carry are intended to sell the paper' (Chagutah, 2010). Hence the framing of headlines is done in order to retain attention more than it is to inform, educate and mobilise. For instance, *The Sunday Mail* used the following headlines: 'Climate change policy on the cards', 'Climate Change Reality Dawns on Rural Farmers', Climate Change Threat to Biodiversity--Nkomo, Climate Change--Traditionalists in Denial, Climate Change Mitigation Strategies Vital, Adapt to Climate Change-VP Mujuru, Climate Change-Threat to MDGs, Indigenous Seeds key to Country's Climate Change Adaptations, President Attends UN Climate Change Talks, Climate Change Affecting Crop Production and 'War against climate change rages in Zimbabwe'. The most eye-catching and sensational headline uses metaphors of war. It constructs Zimbabwe as a battleground where people are fighting tooth and nail against climate change. Climate change is presented as 'devastating', 'adverse' and 'ravaging'. It has been shown that when it comes to environmental reporting, emotion and sensation sell better than facts. According to Elma Pollard, editor of the Green Times, 'editors only care about sensational stories because it brings money. They do not care about saving our planet, because it doesn't make enough financial sense'. Another interesting headline reads: Adapt to Climate change-VP Mujuru. It reads as if it is an order from the top rather than a clarion call for different sectors to devise adaptation strategies. Given the polarised nature of the media environment in Zimbabwe, such a headline frame invokes commanding connotations rather than gentle chiding of citizens to take climate change seriously.

In contrast, *The Mail and Guardian* has a variety of headlines ranging from sensationalist, alarmistic and informative. For instance, 'China's sweet climate change deal', 'climate change can be an 'opportunity', says Stiglitz', 'climate-change policy ignores women farmers', Kenya's rainmakers called to combat climate change', Al Gore takes aim at climate-change skeptics', Nedbank, the Green Trust and Climate

Change, climate change champions' No nation can solve climate change alone', SA on climate change: 'No money, no deal', 'UN warns of climate change threat to human progress', Adjusting to climate change', and African Universities' united in climate change response'. The framing of most headlines has an international and pan-African appeal and gives primacy to the global scientific consensus which calls for action instead of inaction. Another misleading headline reads: 'SA on climate change: 'No money, no deal'. It constructs South Africa as a money charlatan, whose sole reason for signing the climate deal is matrixed on the availability of money from the developed world. It sends the wrong signals in the sense that it obfuscates other important issues such as the reduction of carbon emissions and technology transfer tied to the climate deal.

The media has a responsibility to report accurately, responsibly and sufficiently on climate change. Behavioural changes towards climate change has the potential to empower citizens to lobby and advocate for policy changes and to use their consumer power to implement localised solutions. There is a tendency to reify hard scientific data' as if climate change is all about statistics. It must be noted that behind those statistics are people's livelihoods and survival strategies being washed down the drain. The media have a vital role to play in the mediation and mediatisation of the climate change-education and raising public awareness. 'The environment is not something out there that needs protection by a few privileged people who have the time and money—it is integral to our well being and the continuation of our lives. If it goes under, there is no economy; it is as simple as that' (Dries Pienaar, Mpumalanga Tourism and Parks Agency). 'There are many important topics that need to be covered. The ignorance of the press is causing ignorance to spread further among the media itself and finally among the audiences. Journalists need to be more informed.

Despite the widely held belief that the media, as a critical enabler of sustainable development, acts as a bridge between the public, decision-makers, and those providing information on the country's ecosystems, a cursory look at the media in Zimbabwe reveals a dearth of coverage of environmental issues.

So where does the problem of lie?

- News production is business—the business of business is business (Sparks, 2004) (It is not because of the philanthropy of media organisations that we get our newspapers every day but out of their pursuit of profit)—organisational and extra-organisational forces shaping news production processes—the beat system, filters (gatekeepers and gate watchers)— Newspapers are commercial products and the stories they carry are intended to sell the paper. Among the news items published, certain stories are considered most likely to maximize sales and these are often placed on the front page of the paper.
- Urban biases of newsrooms in Southern Africa (Zimbabwe has no private community newspapers, only government mouthpieces which are underfunded and a state run news agency which poorly resourced. On the other hand, South Africa have a three tier media system—community, commercial and public, however illiteracy and lack of media diversity (The Big Four Monopoly) continue to hamper efforts aimed at improving the mediation of climate change in the country.

- Dearth of science journalists in our newsrooms—environmental journalism curriculum doesn't exist at universities and colleges. This creates over-dependence on 'experts' to frame the climate change discourse often using
- Hierarchy of importance ascribed to different issues by a news organization—factors which determines whether environmental issues make it onto the media agenda in the local press is a complex interplay between various factors. These include the influence of issue proponents, proprietary power, and the editorial policy with its influence on the value judgments of gatekeepers, exposure of the issue in other media, spectacular news events, extreme events that may result in disaster, and, sometimes, evidence of environmental processes (Dearing and Rogers, 1996).
- Environment news reporting is not neutral and it is routinely packaged so as to conform to the ideological and philosophical moorings of the proprietors (Tigere, 2010)
- Lack of competence of assigned reporters, gatekeepers' discretion, and the commercial imperative of the press, environmental reporting, as a category, competes less favourably with other news specialty areas for space on the media agenda.
- It is all the more important for professionals, journalists and all media experts who cherish solid values, convictions and the freedom to think and analyse, instead of simply transmitting environmental information from institutions, business entities, governments and their structures. When it comes to nature and the environment, there is a great need for journalists to make independent assessments of the environmental situations and to propose actions at all levels of society.

Which way from here? Citizen centric media and climate change journalism

Given the political and economic factors which influence newsmaking practices in a capitalist environment, it is important to begin investing in citizen centric media which is an important cog in the climate information cycle as information disseminators, mobilisers, translators, and environmental scanners, platforms for debate and fora for intercultural learning. Citizen centric media has the capacity to restore the 'voice' to those threatened by climatic changes. As already intimated above, women and youth who spend most of their lives working in the fields are rarely quoted in newspaper stories on climate change. In the era of new media technologies, citizens armed with technologies of freedom such as mobile phones, personal computers and laptops have the leeway to move from 'consumers' to 'pronsumers and producers', which challenges the authority of mainstream journalists as the exclusive centre of knowledge on the subject', suggesting that 'the audiences knows more collectively than the reporter alone' (Glaser, 2006). Thus citizen journalism can become an antidote to the publisher-centric agenda setting of climate change debates.

It is prudent to ensure that climate change does not just become an add-on to the environmental beat but cut across all the genres. Mainstreaming climate change in political, economic, entertainment and sport news has the capacity to unlock a lot of intricacies driving the whole discourse. All journalists need to understand how rising sea levels are going to impact hard surfaces around the coastlines and make sure that local councillors are making decisions accordingly. The issue is about critical reflection by every journalist on how climate change impacts on their field. For instance, economic journalists should be able to understand the carbon market while health journalists should be able to understand rising heat waves means for

salmonella outbreaks in townships and rural areas and waterborne diseases associated with flooding. It is important to make environmental stories relate to readers—making links between climate change the impact it could have on urban farming, commercial and subsistence farming—loss of soil fertility, job losses in the agricultural sector, loss in coastal tourism revenue, spread of disease causing organisms etc. It is important to create an effective communication loop between journalists and researchers—necessity of background reading before fieldwork. Journalists should find new ways of representing the climate change which are punchy, catchy and attention-grabbing. Southern Africa media organisations need to target new readers---it's likely that your highly literate media savvy (readers) might be exposed to these issues, but there is equally a huge chunk of illiterate and semi-literate readers still living in the dark. In as much as the most literate readers are already in the know, at most risk populations living in inaccessible rural areas need to be reached. In the context of South Africa, community newspapers and radio are the most important forms of communication to arrest ignorance. In Zimbabwe, where such media is non-existent, it is important to reincarnate traditional forms of communication such as oramedia and word of mouth through agricultural extension officers and traditional leaders. These forms of communication are indispensable in the context of climate change. However, the big question is: Is the media asking the right questions to policy makers, climate scientists, business people, city developers, municipal managers?

This paper also calls for the introduction of climate change journalism courses as part of curricula in order to create a critical mass of well trained science journalists instrumental in mobilising and sensitizing their communities. This paper argues for a paradigm shift asserting that the time is ripe for the discipline at journalism training schools in Africa to welcome a new baby in the family of journalism: climate and environmental journalism. Whereas politics, sports, economics, entertainment and health journalism have received considerable attention in most journalism curricula in recent years, the introduction of climate and environmental journalism courses would permit better understanding of the sustainable development challenges as well as enable journalists to better respond, from an informed position, to the challenges of development in such areas as environmental degradation, climate change mitigation, adaptation and disaster warming among others.

Concluding Remarks

From the findings discussed above, it can be deduced that climate change remains an add-on beat to the traditional newsroom beats such as politics, business, sports and entertainment. The coverage of climate change in two weekly newspapers in South Africa and Zimbabwe demonstrates that the issue is still far from being taken serious. This paper has demonstrated that representations and news discourses of climate change in selected South African and Zimbabwean newspapers have largely been framed within the strictures of the global scientific hegemony which gives primacy to alarmism, technocratic jargon, and officialdom. Such reportage has thus far been instrumental in the creation, reproduction and circulation of top-down approaches to climate change adaptation which obfuscates the role of indigenous knowledge systems and constricts voices of the poor in local debates. It also argues that advocacy and translation role

of media in Africa is being constrained by the dearth of science journalism, news commodification, media commercialisation, and urban bias of newsrooms. In a context where climate change is threatening to wipe off livelihoods of billions of people, the media remains crucial for the dissemination of truthful information on weather forecasts and disaster warning to the public within the climate information cycle. There is dominance of international framing of climate change stories particularly in South Africa, whereas in Zimbabwe, human interest stories enjoy favourable coverage. The use of jargon seems to suggest that climate change is still a relatively new subject in African media.

Charles Chikapa

Author: Charles Chikapa

Co-Author: Rex Chapota

Introduction

Over the past six decades world agriculture has become considerably more efficient, according to the Food and Agricultural Organisation (FAO). Improvements in production systems and crop livestock breeding programmes have resulted in a doubling of food production while increasing the amount of agricultural land by just 10 per cent. However climate change is expected to exacerbate the existing challenges faced by agriculture especially in developing countries. In Malawi 90% of Malawian households are engaged in agriculture, with 81% of the active rural population classified as subsistence farmers – using low input rain fed farming. Following a bad maize harvest in 2005, almost five million of Malawi's 13 million people needed emergency food aid and although food security has improved, it is still an ongoing issue of concern, particularly amongst the large population of subsistence farmers. The purpose of this presentation is to show that community radio can be used as catalyst to improving food security in the face of challenges brought about by climate change.

The Importance of Radio

In 1997, UNESCO estimated that 170 million Africans owned a radio and that radio set ownership would increase on average by at least 4 per cent per year. Ownership was estimated at more than 200 million sets in 2002. Radio transmission networks reached approximately 60 per cent of the population of Sub-Saharan Africa in 2001. Household surveys between 2000 and 2006 revealed that 51 per cent of rural households in SSA owned a radio. In a region where less than 3 per cent of the rural population has fixed phone lines, where only 6 per cent of rural households own a television, and where less than 1 per cent of rural villages have access to public internet, radio remains the dominant medium for communication in rural African homes.

Africa Farm Radio Research Initiative-AFFRI

Taking advantage of the potential for Radio, Farm Radio International (FRI) implemented The African Farm Radio Research Initiative from April 2007 that was aimed at gathering, implementing, evaluating and sharing best practises for using radio-based communication strategies to enhance food security in Africa. Malawi was one of the countries identified for the Project. In Malawi, the project worked with five radio stations. This presentation focuses on one of the participating community radios known as Dzimwe Community Radio.

Profile of Dzimwe Community Radio Station

Dzimwe Community Radio is based in the district of Mangochi in the Southern Region of Malawi. Established in 1998, Dzimwe Community Radio was Malawi's first Community Radio Station and works closely with listeners to facilitate community development. The Community Radio Station aims to provide a platform for the concerns of the rural communities in order to find solutions that will improve the lives and livelihoods of their community. The Radio Station is staffed by volunteers who receive weekly

allowances. Although there is a stable group of core staff with significant experience at the station, they regularly have to train new volunteers because of high staff turnover. The team is highly committed to the Community Radio Station and believes that it fulfils an important role, by enabling the community to raise issues that affect them directly. Dzimwe Community Radio works hard to cover the issues affecting the community. In Mangochi there are 803,602 people and Dzimwe's transmitter reaches 50% of these people. Research suggests that in areas that can receive Dzimwe programmes, 80% listen to Dzimwe Community Radio.

The AFRRRI campaign

AFRRRI was implemented under an approach known as participatory radio campaign that goes far beyond the tradition programming rather aims at helping farmers to make informed decisions about adopting a specific improvement that has been selected by peers and is based upon the best available information through an interactive process. Dzimwe and AFRRRI partnership involved to main components namely, improving the quality of farm radio programming, and providing technological advice in order to improve farming practices and achieve food security. This arrangement required capacity building in broadcast staff, securing adequate equipment and increasing interaction between stakeholders (broadcasters, farmers, experts).

In order to monitor the impact of the AFRRRI campaign, AFRRRI employed an action research process where stakeholders in the project were able to plan, reflect and act together to ensure that information needs of small holder farmers are met. *Dzimwe Community Radio* worked with three impact communities within the catchment area. Dzimwe staff conducted a baseline survey before the first campaign and found that people from these communities do listen to Dzimwe's farming programmes and tend to follow what they say. The first AFRRRI campaign with Dzimwe encouraged the farmers to use a hybrid maize that was a more reliable crop. The farmers were reluctant to stop using their old varieties and told the producers that the hybrid maize is unpalatable and has a shorter shelf life when stored. Dzimwe monitored the impact of the campaign and recorded the number of people who had used improved hybrid maize varieties and the number of households that still had maize stored at the end of the season. In October 2009, Dzimwe started the second AFRRRI campaign which encouraged farmers to plant maize in a different way; by changing the spacing between maize seeds in order to increase yield (1 to 1 maize planting rather than 3 to 3 maize planting).

The effect of the campaign

The partnership with AFRRRI has been very beneficial to Dzimwe Community Radio because AFRRRI have provided Dzimwe Community Radio with equipment (including a better system for phone-in programmes), as well as training for station staff for example on using ICTs (Information and Communication Technologies). The partnership has enabled improved communication with farming communities and the increased interaction with the community has been a good way of gathering feedback on programmes. The producers believes that the campaign has improved food security and people's health. The current focus is on maize, but the techniques that the staff have learnt and used during the AFRRRI radio campaign could be extended to other crops and legumes. On the overall, AFRRRI evaluation results show that the campaigns can quadruple the adoption rates of a technology, over 75% of engaged communities are able to follow the whole campaign and that it helped over 21% of small holder farmers to start practicing the technologies that were disseminated whilst over 36% demonstrated detailed knowledge of the technologies (FRI, 2011. AFRRRI Research Brief)

Edith Abilogo

Cofcca: Emphasis on shaping the debate on adaptation to climate change in media

Edith Abilogo, Denis Sonwa, Youssoufa Bele

Medias can play an important role in shaping the debate on climate change. In Central Africa where efforts to address climate change are oriented on attenuation initiatives and solutions, adaptation to climate change remain in an early stage. The Congo Basin Forest and Climate Change Adaptation Project (CoFCCA) funded by IDRC and hosted by CIFOR was developed to support the policy dialogue around forest and climate change adaptation in the Congo Basin. Media within the region appear to be among major actors who can make it possible although they show certain limitations in their intervention in this arena.

This paper reviews the situation of media communication in the forest and adaptation to climate change sector. It shows the dynamics and initiatives conducted by CoFCCA in the subregion in order to develop and enforce media discourse; These include mainly (1) Media science-policy dialogue workshop, (2) scholarship support to master students from communication schools and (3) partnership with journalists networks. For each of those activities, we present (a) Why it was important to develop it and what was the objectives, (2) What was implemented already and (3) what was achieved, lessons learned and way forward. The paper is ending by highlighting key points of discussion over the need to continue such science-policy-media interactions within the Congo Basin and how to capitalize the experience.

1- The Media-Science-Policy dialogue

Cofcca project developed from 2009 to 2011 three workshops with media representatives in Bangui, Central Africa Republic (September 2009), Kisangani DR Congo (September 2010) and Cameroon (February 2011). These trainings were aimed to strengthen the capacity of media in those countries to deal with issues related to forests and adaptation to climate change and also to initiate direct exchanges between forest and climate researchers and journalists, so that in the long term, climate change become a highly covered topic in their respective media. 120 people among which sub-regional bodies representatives such as COMIFAC, government officials, researchers and journalists attended the three training workshops.

Trainings in Kisangani and Bangui were mainly made up of plenary sessions' presentations, discussions, grouped field trips to observe and discuss climate change impacts on communities and environment, and discussions around the need for a specialized network. In Cameroon, it was articulated into the following entry points:

- a) A survey questionnaire was sent weeks before to identify and monitor the state of coverage of forests and climate change adaptation issues in Cameroon Media in order to identify the major needs for journalists;
- b) There were plenary sessions presentations and exchanges between policy makers, scientists and journalists in Cameroon;
- c) A special session was done to discuss the further development of a 3-months programme of mentorship of the 30 trainees by the team of scientists while journalists agreed on mentoring at least 2 junior COM professional after the workshop;
- d) Field trips were made each day of the workshop alongside of the Nyong River and downtown the city of Mbalmayo to identify evidence of climate change impacts on forest resources; and also at the planted forest of the National School of Forestry (ENEF);
- e) Movies session in the evening to watch and exchange on video made by journalists during the past years on the topic with the aim to explore how to better address such issue in the future.

2- Scholarship support to Masters students of communication Schools/universities

Apart from timely trainings with media representatives and documentation sharing, CoFCCA Project launched in July 2010 a fellowship programme for Masters students in Journalism and communication to do their research thesis on adaptation to climate change and forests-related issues in Central Africa. The candidates had to submit a project research on the issue of CC in the three countries of implementation of the project. After extended call in those countries, six scholars (1 CAR, 2 DRC, 3 Cameroon) were funded and are actually finalizing their research. In addition to the mentorship of CoFCCA scientists and Regional communication staff, those fellows have been receiving support from other CIFOR scientist and regularly updated on all new publication and research findings published in CIFOR. In the way to continuously strengthen their capacity in understanding forests, climate change and adaptation issues, they were also involved in many activities organized by the project and the Regional Office based in Yaounde, Cameroon.

3- Partnership with media network

Through out the project implementation, CoFCCA managed to identify some media networks in the sub-region in order to establish some partnership.

In the Central Africa Republic and in DR Congo, it was rather difficult to identify networks involved in environmental issues, and even those created after CoFCCA training had some difficulties in effectively develop activities around climate change in their countries.

In March 2010, CoFCCA establish a partnership with SciLife, a specialized network of science journalists affiliated to the World Science Journalist Network. It is within this partnership that the Project organized most of its activities with the media in Cameroon such as science café, media tour in project sites, organization of the training workshop and the actual mentoring programme scheduled from March to May 2011.

4- Way forward

The Science-Policy-Media dialogue initiated by CoFCCA project in Central Africa will culminate with a regional workshop with directors and program directors of schools and universities involved in the training of journalists and communicators in DRC, CAR and Cameroon. The objective of the meeting is to bring together scientists and universities to discuss ways to introduce forest and climate change issues into courses. Towards this process, CoFCCA is supported by a lecturer of the main school of journalism and communication in the sub-region (ASMAC) whose mandate is to identify the actual situation of learning programs in our communication institutions in regards to the environment and climate change issues, so that the main gaps are outlined and raised as entry points for the above mention workshop.

Conclusion

CoFCCA activities towards shaping the media discourse in the Congo Basin showed the need for media trainings on climate change coverage and reporting. During all the three workshops, scientists, policy makers and journalists found it highly valuable to have such platform of interaction. Moreover, these trainings were considered by most of

them as post-academic training, and in the Central Africa context where most of the professional journalist are not trained in specialized issues, and where both public and private universities do not innovate nor integrate environment in programs, they appeared as a mean to acquire a better knowledge of the topic so that in the future, they can cover news in relation to the topic knowingly.

This experience is a pilot example which could improve the coverage of climate change issues in particular and of environmental issues in general in the sub-region. In CoFCCA we believe good with well-trained specialized journalists and communicators the issue of forests and adaptation to climate change will be highlighted into media discourse, influence all the stakeholders involved in the sector and therefore sensitize the general public.

Key words. Climate Change, Adaptation, Forest, Congo Basin, Central Africa, Communication, Media