



S.A.P.I.E.N.S

Surveys and Perspectives Integrating Environment and Society

5.2 | 2012

Vol.5 / n°2 - IUCN Commissions

Creating Pathways for Positive Change

Wendy Goldstein, Nancy Colleton, Sandra Rientjes, Frits Hesselink, Chuck Phillips, Juliane Zeidler, Justine Braby et Keith Wheeler

Gaëll Mainguy (éd.)



Édition électronique

URL : <http://journals.openedition.org/sapiens/1419>

ISSN : 1993-3819

Éditeur

Institut Veolia

Référence électronique

Wendy Goldstein, Nancy Colleton, Sandra Rientjes, Frits Hesselink, Chuck Phillips, Juliane Zeidler, Justine Braby and Keith Wheeler, « Creating Pathways for Positive Change », *S.A.P.I.E.N.S* [Online], 5.2 | 2012, Online since 12 August 2012, connection on 03 May 2019. URL : <http://journals.openedition.org/sapiens/1419>

Licence Creative Commons

Surveys

Creating Pathways for Positive Change

W. Goldstein¹, N. Colleton², S. Rientjes³, F. Hesselink⁴, C. Phillips⁵, J. Zeidler⁶, J. Braby⁶, K. Wheeler⁷.

1. Deputy Chair IUCN CEC and Graduate School of the Environment, Macquarie University, Sydney, Australia
2. Institute for Global Environmental Strategies, Arlington, Virginia, USA
3. Kennis Management Mediation, Tilburg, The Netherlands
4. HECT Consultancy, Utrecht, The Netherlands
5. Sapience Organizational Consultants, Franconia, New Hampshire, USA
6. Integrated Environmental Consultants Namibia (IECN), Windhoek, Namibia
7. Chair IUCN CEC and ZedX Inc., Bellefonte, Pennsylvania, USA

Correspondence to: wendy.goldstein@mq.edu.au

Abstract *One of the key recommendations of the 2012 report, Resilient People, Resilient Planet: A Future Worth Choosing, is “empowering people to make sustainable choices.” Prepared by the United Nations Secretary-General’s High-Level Panel on Global Sustainability (2012), this landmark report reframes sustainability while—like other reports before it—challenging those in the conservation community to consider how to create the pathways to empower people to make sustainable choices, to change their future, to be resilient.*

The hope of empowering people to make sustainable choices is not new, but the approaches and tools by which improved decision-making is facilitated and supported are changing rapidly. This article examines emerging, successful trends in communication and its link to change management. It explores contextualizing a problem or challenge, influencing policy through strategic communication, engaging stakeholders, and managing change. To better describe these linkages, this article presents a sample change strategy, the processes used to manage change, and the various aspects of a change management approach.

Creating pathways for positive change is of special interest to the representatives of the International Union for the Conservation of Nature’s (IUCN) Commission on Education and Communication (CEC), who developed this article. Sharing a vision of a global community that loves and values nature, the Commission facilitates capacity building, change management, knowledge management, learning processes and communication activities worldwide as a way to create pathways for positive change.

Keywords: Resilience, stakeholder, change, management, communication, environment.

TABLE OF CONTENTS

1. Introduction
2. Applying social science research to guide communication
2.1 Developing New Approaches to Communication
2.2 Understanding What Gets Attention and Why
2.3 Framing to Motivate Change
2.4 Changing Behaviour through Government Action
3. Influencing Policy through Strategic Communication
3.1 Understanding the Policy-making Process
3.2 Crafting Policy-Relevant Communication
3.3 Delivering the Message
3.4 Assessing Impact
4. Engaging Stakeholders
4.1 Stakeholder Analysis
4.2 Stakeholder Interests
4.3 Avoiding and Resolving Stakeholder Conflicts: Good Negotiations and a Clear Process
4.4 Conclusions
5. Managing Positive Change
5.1 Why Change Fails
5.2 Behavioural Component
5.3 Change Acceleration Process (CAP)
6. Conclusion

1. INTRODUCTION

Somewhere in the world today a new road will connect previously isolated villages, a new school will open its doors and welcome students, a political or business leader will set forth a path for the future, and someone will speak on a mobile phone for the first time. At the same moment, an extreme weather event will flood a habitat, fish will swim into polluted waters, forests will be cut, and carbon will continue to be emitted into the atmosphere. Whether good or bad, natural or manmade, local or global, humans need to respond to change constantly.

Unlike other species, humans can influence or guide most changes. The ability of groups or communities to cope with these stresses is called 'social resilience' (Adger, 2000, quoted in Gallopin, 2006, p.297). In other words, resilience includes a capacity of response and an ability to cope with the impacts produced by a perturbation in the environment or society as well as being able to take advantage of opportunities (Gallopin, 2006, p.300).

Resilient People, Resilient Planet: A Future Worth Choosing (United Nations Secretary-General's High-Level Panel on Global Sustainability, 2012) suggests that the people of the world are not yet on a pathway to being a resilient people, where they can quickly respond or adapt to changes. The report identifies three major strategies towards increasing its vision of resilience: empowerment, a greener economy, and governance. These strategies are essentially oriented to social change—to developing and deploying human capacities, rethinking and re-organising our economies, and improving the governance of our societies.

The report recommends many actions or enabling conditions to contribute to empowerment. These include basic education, health services, gender equity, land tenure for women and democracy. These enabling conditions require transforming structures that are essential for people to "become beings for themselves" (Freire, 1993, p.55).

Resilience from an organizational management perspective is when the entity—whether a business, government, or non-governmental organization—has the ability to adapt to changing demands and external and internal influences with flexibility and fluidity. For example, organizations that have flatter and less complex hierarchies, an organizational culture that encourages innovation and creativity, and a decentralised governance structure all help empower people. As Freire (1993) demonstrated, people empower themselves by understanding "more clearly what and who they are so that they can more wisely build the future" (p.65) and by developing "their power to perceive critically the way they exist in the world" (p.64). Processes such as dialogue, critical and systemic thinking, and learning by taking action on the world all support empowerment (Freire, 1993; Brown *et al.*, 2005). "Resilient organizations have learning built into their system. With good learning practice and tools the organization anticipates change, recognizes it, and adapts" (C.W. Phillips & G. Martin-Mehers, personal communication, August 2011).

The IUCN Commission on Education and Communication (CEC) examines how certain practices can create pathways for positive change in conservation. Their cumulative expertise spans communication and public outreach, formal and informal education, capacity building, policy development, knowledge management, and change management. To mark the occasion of the 2012 World Conservation Congress, members of the CEC leadership prepared this article to share knowledge about how to influence sustainable development and conservation through the use of strategic change approaches.

The paper summarises useful insights and current thinking about how to engage people and bring about change with and by people for environmental and social resilience and is based on four pillars:

- Applying social science research to guide communication;
- Influencing policy through strategic communication;
- Engaging stakeholders; and
- Managing positive change.

2. APPLYING SOCIAL SCIENCE RESEARCH TO GUIDE COMMUNICATION

Never before has so much information about the planet been available. Each day, satellites aircraft, unmanned aerial vehicles, balloons, ocean buoys, ships, submersibles and other in situ instruments collect data and provide vital details on subjects such as forest cover, floods, coastal regions, glaciers,



weather patterns, and ocean productivity. Geospatial technology advancements enable people to access, analyse, and visualize their world in new ways. Through the use of smart phones and cameras, citizen scientists throughout the world are also providing local observations and providing them on platforms such as GoogleEarth allowing people anywhere and any time to see changes on local scales.

An abundance of data does not translate into information, just as an abundance of information does not translate into knowledge, and knowledge does not translate into improved decision-making or action. Identifying challenges doesn't necessarily result in swift action to resolve a problem. One of the greatest challenges in the sustainability field is how to communicate urgent issues and motivate change.

Although published more than 20 years ago, *Our Common Future*, the ground-breaking report of the UN's World Commission on Environment and Development led by former Norwegian Prime Minister Gro Harlem Brundtland, captures sustainability's challenge even today:

In the middle of the 20th century, we saw our planet from space for the first time. ... From space, we see a small and fragile ball dominated not by human activity and edifice but by a pattern of clouds, oceans, greenery, and soils. Humanity's inability to fit its doings into that pattern is changing planetary systems, fundamentally. Many such changes are accompanied by life-threatening hazards. This new reality, from which there is no escape, must be recognized—and managed. (UNWCED, 1987, p.1)

An important departure from the 1987 Brundtland Commission report and today's extensive global investment in environmental change science is the emerging recognition of the significance of social science research, which helps us understand how people make choices to change the pathway to a more resilient planet and people.

2.1 DEVELOPING NEW APPROACHES TO COMMUNICATION

Creating pathways to positive change will require new approaches. This was the essential message of the provocative report by Michael Shellenberger and Ted Norhaus, *The Death of Environmentalism: Global Warming Politics in a Post-Environmental World*, which argued that the environmental movement needed to be completely transformed if it was to be capable of addressing climate change. Among other criticisms, the report asserted that none of the US environmental public campaigns articulated a "vision of the future commensurate with the magnitude of the crisis" (Shellenberger & Norhaus, 2004, p.6) and challenged the environmental and conservation movement's focus on trying to build a mass audience and its emphasis on themes like reducing mass consumption. They argue that a more appropriate response would be mass government investment in technological innovation, particularly through the military (Lalasz, 2012, March 1).

When developing new approaches, direction can be found in diverse fields such as psychology, marketing, social science, decision science, public relations, linguistics, communication management, cognitive and brain sciences. The cognitive linguist George Lakoff, rejecting traditional views, argues that: "Real reason is: mostly unconscious (98%); requires emotion; uses the logic of frames, metaphors and narratives; is physical (in brain circuitry); and varies considerably as frames vary." (Lakoff, 2010, p.72). Lakoff cautions that it does not work to try to give people the facts about 'a future worth choosing' in the hope they will reason to the right conclusion. "The facts must make sense in terms of their system of frames, or they will be ignored. The facts, to be communicated, must be framed properly. Furthermore, to understand something complex, a person must have a system of frames in place that can make sense of the facts" and building these takes time (Lakoff, 2010, p.73).

2.2 UNDERSTANDING WHAT GETS ATTENTION AND WHY

Gaining attention for environmental or sustainability issues in society is very competitive and requires professional public relations (PR) expertise. Businesses, non-government organizations (NGOs), political parties, religious organisations, unions, and governments use public relations staff or companies to relate to their stakeholders, gain positive attention for their organisation, share ideas, or even market products in a very competitive or noisy world. PR, the "management of communication between an organisation and its publics" (Grunig, 1992, p.4), is more than media relations, publicity, or communication techniques; it plays a part in "a continuous process of conflict over political and economic power, but also as part of a wider struggle around the production and use of social meaning" (Greenberg *et al.*, 2011, p.68).

The climate change issue has been the theatre of an intense 'war of ideas' and the strategies deployed have attracted many analytical articles (Nesbit, 2011; Greenberg *et al.*, 2011). In the United States, views in 2010 about climate change were divided along strong partisan lines with a Pew Research Center survey (2010, June 17) reporting that over "half of Democrats (56%) saying it is a very serious problem, whereas only 18% of Republicans are this concerned. More than one-in-four Republicans (28%) think climate change is not a problem at all" (p.70). This represents a lower level of concern about climate change than elsewhere in the world: in 19 of 22 countries surveyed "at least three-quarters of the population perceive global climate change as a serious or very serious problem" (*ibid.*).

Research suggests that public interest in environmental issues fluctuates over time. The American public gave higher attention to environmental concerns in 2006 and 2007, during a period of low unemployment and a decade of reasonable economic stability. Recently, with the global financial crisis and its impacts on unemployment, jobs and the economy,

environmental issues and global warming have sunk to the bottom of the priority list (Nisbet, 2011). This is described as the public having a “finite pool of worry” by Leiserowitz *et al.* (2010, p.4), so that as “one perceived risk gains attention, other risks often are bumped from concern” (Nisbet, 2011, Chapter 4).

2.3 FRAMING TO MOTIVATE CHANGE

As already touched on in Section 2.1, people think, mostly unconsciously, in terms of systems of structures called frames, each one of which is a physical neural circuit in our brains. “We use our systems of frame-circuitry to understand everything, and we reason using frame-internal logics. Frame systems are organized in terms of values, and how we reason reflects our values, and our values determine our sense of identity” (Lakoff, 2009, May 19).

According to Nisbet (2009),

“Frames are interpretive storylines that set a specific train of thought in motion, communicating why an issue may be a problem, who or what might be responsible for it, and what should be done about it. Framing is an unavoidable reality of the communication process, especially applied to public affairs and policy. There is no such thing as unframed information, and most successful communicators are adept at framing, whether using frames intentionally or intuitively” (p.15).

Under the right conditions, words activate frames, so communicators have to choose their words carefully to communicate a complex fact to activate the right frames. If people do not have such frames, then a longer process of building these in people’s minds is required through repetition. As Lakoff (2010) puts it, “All words in all languages are defined in terms of frame-circuits in the brain. Ultimately, framing is about ideas, about how we see the world, which determines how we act” (p.73). The moral significance of the environment “can only be communicated honestly and effectively using the language of value-based frames, preferably frames already there in the minds of the public” (Lakoff, 2009, May 19).

Most people do not have the overall background of frames to be able to understand the real crisis of our times in climate change and the environment. Even worse, most people have in their brain circuitry “frames that would either contradict the right frames or lead them to ignore the relevant facts” (Lakoff, 2010, p.74). Thus, if the facts don’t support a person’s values, they are not retained. This may be related to self-preservation; according to Crompton (2010), “...individuals are often predisposed to reject suggestions that they should change aspects of their behaviour where these are important in establishing and maintaining their social roles” (p.18).

In the case of climate change, and particularly with reference to rebutting the climate change denials of what he refers to

as “conservative moral systems”, Lakoff suggests developing frames that connect the values that underlie our concerns about our planet’s future: empathy, responsibility, freedom, and our ability to thrive, linking to everyday themes, like health, jobs, and their children’s future. These ideas need to be repeated over and over (Lakoff, 2010, p.76). He suggests the following practical advice:

- Frame issues in terms of moral values rather than policies.
- Don’t reinforce your opponent’s frames by repeating them or by structuring your argument to counter them.
- Frame facts in narratives that exemplify the emotional or moral context.
- Make the message accessible by avoiding jargon and addressing everyday concerns.

2.4 CHANGING BEHAVIOUR THROUGH GOVERNMENT ACTION

To achieve policies for conservation, sustainability or to develop more resilient societies, people must change their behaviour. How to bring about behaviour change for social and environmental benefits is a mainstream topic of governments globally (Branson *et al.*, 2012). Governments typically use a range of instruments from regulation to taxation and financial incentives to change behaviour – often referred to as “shoving”. These are often used in combination with communication which is oriented to stimulating voluntary change by connecting to people’s sense of responsibility, explaining other instruments or lowering people’s perceived barriers to making a change.

To bring about change in people it is necessary to make the change as easy as possible: identify obstacles and then remove those barriers. More common techniques to try to induce change, such as arguing, promising, or threatening, fail because they “increase tension rather than easing tension by removing barriers that make behavior change easy” (Hernandez, 2009, December 19). Such observations have led to the idea of “nudging” gaining credence, whereby behaviours are encouraged “simply by modifying the environment in which people conduct their actions” (Branson *et al.*, 2012, p.4). An example of a nudge is for shops to charge for plastic bags, a practice which has successfully reduced their use. Nudging is a low cost solution, but has its limitations, and according to a UK government report, “usually the most effective means of changing behaviour at a population level is to use a range of policy tools, both regulatory and non-regulatory” (*ibid.*, p.6).

How well do people accept government behaviour change strategies? The Social Research Institute Ipsos MORI explored the public acceptability of a range of political interventions in 24 countries, intended to change personal behaviour on smoking, eating unhealthy foods, saving and living in an environmentally sustainable way (*ibid.*). The report found that there is majority support for all types of intervention across all of the countries polled, including surprisingly high levels of support

for prohibitive government legislation, such as outright bans on smoking and unhealthy foods. The provision of information about how to change one's behaviour is highly supported, as are financial incentives, with nudge strategies considered the most acceptable. Legislative approaches receive less support, with acceptability decreasing as more freedoms are lost. The variety of cultural norms across different countries means people have different levels of acceptance of government intervention: it is higher in India and China than in wealthy North European nations and the USA (*ibid.*).

The Ipsos MORI report concludes that there are no magic levers that will result in a desired change of a specific behaviour. There is a need to draw on a broader notion of public preparedness that understands that public acceptability is part of a cycle of change, and is not simply a static indicator of support.

These insights reveal the importance of public surveys and communicating a coherent frame to support environmental policy through an ethical strategic communication process. Increasingly, as highlighted in the practical examples below, governments can gain effective policy outcomes when they engage stakeholders in shaping policy and engage with communicators to help design processes at any early stage of any programme or policy.

3. INFLUENCING POLICY THROUGH STRATEGIC COMMUNICATION

One of the key areas where change must occur to benefit conservation is in the policy arena. Conservation scientists and activists frequently express frustration with the policy system (Zeidler, 2009; Spierenburg, 2012). The key is to understand the basics of communicating to an audience that is not necessarily passionate about conservation, but that has the power to take decisions directly impacting its efforts.

Effective communication is much more than policy briefs, reports or glossy brochures. Instead, it is about setting the stage, creating the mood, crafting the right language and images, and identifying the best time and means to deliver messages. Most importantly, it is about clearly stating the specific actions that are expected from the different audiences being approached (Hesselink & Zeidler, 2012).

Policy makers are the recipients of a plethora of policy, lobbyists, and media briefs. Even before the information revolution, government staff would report being "awash in information" (Weiss, 1977, as cited in Feldman *et al.*, 2001). Capturing their attention should not be attempted through content, but primarily through style. A number of effective techniques have been identified through extensive research, including using anecdotes, clearly articulating the meaning of data, and identifying the relevance of research findings to policy questions (Feldman *et al.*, 2001).

Conservationists attempting to influence policy commit common communication errors, as outlined in Box 1. Scientists also find it difficult to step out of their scientific role and to understand the varying perceptions that exist among different stakeholders (Hesselink *et al.*, 2007). As Olson (2009) puts it: "...communication is not just one element in the struggle to make science relevant. It is the central element. Because if you gather scientific knowledge but are unable to convey it to others in a correct and compelling form, you might as well not even have bothered to gather the information" (p.9). Strategic communication and improved framing of important messages in a policy-relevant manner can help reduce tension and avoid conflict. Amongst the key features are:

- understanding the political process and the art of influence;
- having a clear mandate and focus;
- gaining legitimacy by producing policy-relevant work; and
- building partnerships with like-minded individuals and groups Haid *et al.* (1999).

Box 1: The eight most common errors in communicating to influence policy

1. Letting the facts, figures and other evidence speak for themselves
2. Using communication as an add on and not integrating it in the project
3. Not being aware of the principles of systemic change
4. Forgetting that influencing policy means influencing people
5. Using messages that do not stick
6. Applying wrong communication approaches or wrong expertise
7. Forgetting to develop a strategy
8. Sticking to old fashioned prejudices regarding spin, style and PR

From Hesselink & Zeidler (2012).

3.1 UNDERSTANDING THE POLICY-MAKING PROCESS

Zeidler (2009) recognizes four distinct stages of policy-making: development, implementation, impact evaluation, and review, which represent different entry points to influence policy. Communication strategies vary in terms of influence – from simply distributing research results to the relevant policy agents, to informing a specific current policy debate, to directly influencing government policy and investment (Fisher *et al.*, 2008).

Understanding the different policy stages is also useful for identifying the diverse group of individuals involved at each of the levels of the policy-making process. Effective policy communication requires clearly identifying the target audience

and understanding its specific needs. Since people respond better to others they trust, rather than to logical arguments or cost-benefit analysis alone, building relationships with key players is an important step that will also help make these needs more evident.

Key players in the policy-making process include:

- **Top Decision Maker:** The top executive in Cabinet, who is looking for clear and politically favourable decisions appealing to the voter.
- **Parliament:** A more diverse conglomeration of policy makers, often coming from different party backgrounds and looking for advocacy debates.
- **Environment Ministry Leadership (or its equivalent):** Ministers, Deputy Ministers and Permanent Secretaries or equivalents. As the Environment Ministry is not always perceived to be politically powerful, the Minister will look for policy opportunities that link to the national development agenda to position the Ministry in a more visible, political landscape.
- **Environment Ministry Staff:** This group should provide the policy-relevant technical information. It must be noted that their interests and needs may also be politically motivated.
- **Other Government Institutions:** These tend to have wide ranging and conflicting interests. The environment agenda is often far from their priorities.
- **Non-government Players:** A powerful member of this group is industry. The citizen or “concerned neighbour” who has a direct interest in the specific area of concern can play a strong advocacy role, which can contribute to the communication strategy.

3.2 CRAFTING POLICY-RELEVANT COMMUNICATION

In addition to understanding an audience’s unique set of needs, an effective communicator should also understand the motivations and reward systems in play (Gibbons *et al.*, 2008). For example, since changing policy and practice can lead to costly and sometimes negative administrative or political consequences for a ministry or governmental organization, the dynamics of resistance to change should be addressed. Aware of this potential challenge, an effective communications strategy will identify the current attitudes and behaviours of the intended target group, and include strategies to overcome prejudices, fears and resistance (Hesselink & Zeidler, 2012).

For example, the Damara Tern, a near-threatened unique seabird breeding on the desert coastline of Namibia, has faced considerable conservation problems due to increasing development pressures. Figure 1 illustrates the attitudinal and behavioural changes needed to ensure that the conservation needs of a bird like this will be considered by the government leadership, as well as a strategy to affect the desired changes through a series of actions.

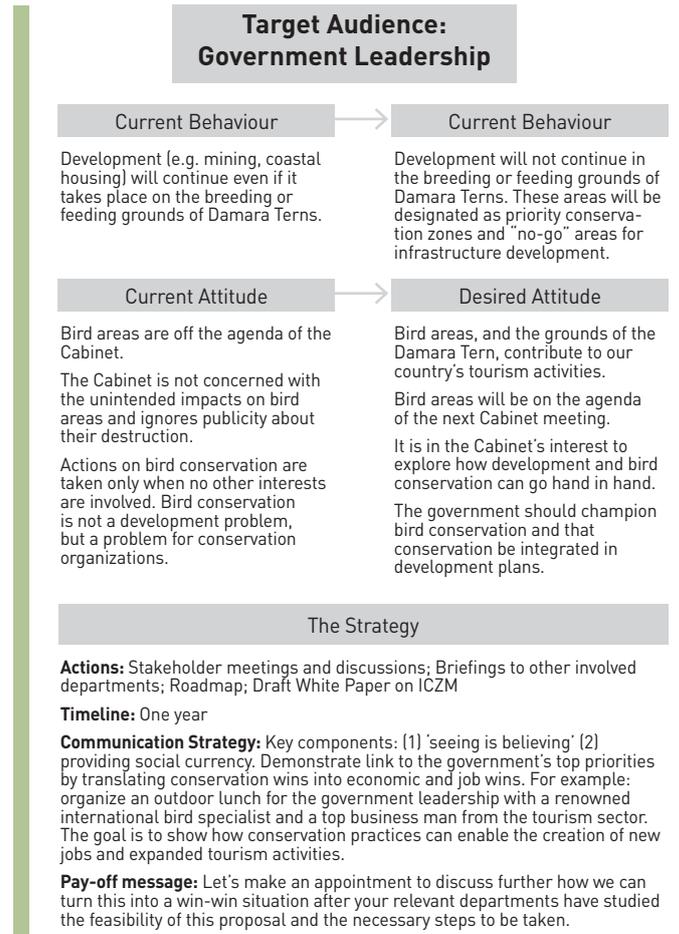


Figure 1: Framework for planning how to influence change in attitude and behaviour of government decision-makers using the example of a near-threatened bird species.

3.3 DELIVERING THE MESSAGE

Once the strategy has been crafted, it needs to be delivered to its target audience using the appropriate communication tools (e.g. Hesselink & Zeidler, 2012; Zeidler, 2009; Hesselink *et al.*, 2007; Haid *et al.*, 1999). For example, if we want to target parliamentarians, a publication that is disseminated to the general public will not suffice. Instead, an appropriate distribution channel must be identified, and the policy message must be crafted in an appealing and concrete manner in accordance with the parliamentarians’ needs and priorities.

3.4 ASSESSING IMPACT

Although the final policy decision is the ultimate measure of success of the communication strategy, it is beneficial to track its impact earlier in the decision-making process. The following questions incite thought and encourage effective progress towards finding what works and what does not, learning from past successes and mistakes and adapting these for future impact on policy decisions:

Table 1. Overview of the number and diversity of stakeholders involved in the Ghana Forest Case Study

Ghana Case Study - Stakeholders, Issues, and Sustainability Interests		
Primary stakeholders	Organizations or individuals with a formal responsibility for environment and sustainable development	<ul style="list-style-type: none"> • Ministry of Land Forestry and Mining • Timber Industry Development Division • Forest Services Division • Wildlife Division • Forestry Commission • Resource Management Support Unit
	Authorities with a responsibility for sectors that impact sustainability	<ul style="list-style-type: none"> • Parliamentary Select Committee • Ministry of Finance & Economic Planning • Ministry of Trade and Industry • Customs • Ministry of Justice • Attorney General • Forestry Research Institute of Ghana • National House of Chiefs
	Commercial land, infrastructure and resource users	<ul style="list-style-type: none"> • Ghana Timber Millers Organization • Ghana Timber Association • Individual forestry companies • Chainsaw loggers (Domestic Timber Associations)
Secondary stakeholders	Non-commercial land and resource users	<ul style="list-style-type: none"> • Local communities • Tourists, recreationists, passers-by
Tertiary stakeholders	Governmental budget holders and other funders	<ul style="list-style-type: none"> • Multilateral and bilateral donors
	Scientists, media, mediators and intermediaries	<ul style="list-style-type: none"> • Academia • National Working Group on Certification • IUCN (facilitating and mediating role with Observer status) INGO • International organizations (e.g. FAO, UNDP)
	NGOs and other civil society actors working on sustainability and the environment	<ul style="list-style-type: none"> • Forest Watch Ghana (coalition of 32 NGOs) • Tropenbos International Ghana (NGO) • CARE International Ghana (NGO) • Media • Civil society (e.g. NGOs around issues as health, gender, rural development, human rights etc.)

- **What was heard, and what was understood?** These two should not be confused. In many cases, messages are heard but not understood.
- **What worked, and what did not in terms of messaging and channels of dissemination and communication?** Why did some messages not induce change? The channels of outreach and dissemination used can prove to be a major impediment.
- **What were the strategic budget allocations, and where was money not spent well?** Because resources and funds available for the conservation communication are often quite limited, it is important to determine their effectiveness. Lessons learnt from budget allocations with limited impact can go a long way towards improving budget allocations in the future.

4. ENGAGING STAKEHOLDERS

A crucial element in realizing social and ecological resilience is stakeholder engagement, or stakeholder participation. Successful and effective action towards sustainability will only be

achieved when projects and policies are acceptable to the people and organizations that will live and work with their impacts (e.g. Susskind, 2009). Thus, stakeholders must be informed and involved from an early stage in the design and implementation of projects, programs and policies.

To a certain extent, stakeholder-focused approaches have replaced the more traditional one-directional or top-down approaches that used to be common in policy-making and communication. Taking a wider perspective, the increasing focus on stakeholders is connected to changes in the social structures of many countries in the world: citizens have become better informed and are more ready to challenge imposed decisions; the commercial sector is more aware of reputational damage and legal claims of poor practice; the lack of manpower and resources makes it increasingly difficult for authorities to enforce top-down decisions against opposition (Rientjes, 2002). This has led to new approaches such as interactive policy-making, corporate social responsibility, partnership agreements, and participatory project management (Lewicki *et al.*, 2003).

This section examines the process of managing stakeholder engagement, illustrating it with the example of a recent IUCN experience that supported the development of sustainable forest governance in Ghana¹. A brief overview of the Ghana case is given in Box 2.

BOX 2 : The Ghana Forest Experience

The European Union wants to buy timber from sustainably managed forests and needs assurance of good forest governance. In 2009, Ghana was the first country to sign a Voluntary Partnership Agreement (VPA) with the European Commission on forest governance following a series of multi-stakeholder dialogues including the government, private sector, civil society, and traditional authorities.

IUCN's CEC played a key advisory role in this process and convinced the government of the relevance of a multi-stakeholder dialogue. The expression and integration of the differing views and interests was instrumental in moving toward the common goal of good forest governance.

Analyzing the Position of the Stakeholders in the Ghana Forest Management Case

The stakeholders in the process are outlined in Table 1. Of these, only the Ghana government and the international organizations were initially in favor of a VPA, while the timber industry was against it, fearing potential additional production costs. Those who were already involved in certification processes did not see any need for a VPA. Chainsaw operators were not really aware or informed at the early stages, since a VPA was not in their immediate interest; and lacking any formal organization, they had little influence. However, as a result of the stakeholder process, they became organized into domestic timber associations.

Forest Watch Ghana, representing civil society, was initially neither in favor nor against the VPA. They sought clarity on the benefits of VPA for local communities and tactically gave their support to the VPA process, canvassing to be given a seat on the Steering Committee. The European Commission (in their role as donor) used its influence to mediate between the government and civil society to reach agreement about the principles of stakeholder engagement.

The direct role of local communities was limited due to their distance from the capital, in consequence of which they were represented by NGOs and international organizations. Forest Watch Ghana actively informed local communities throughout the country and was perceived as a reliable source of information.

Preparing the Ground and Facilitating Stakeholder Involvement in Ghana

Much time was invested in fostering social interactions between the various stakeholders. The IUCN, initially appointed by the Ministry to represent civil society on the Steering Committee, negotiated a more neutral role of observer and facilitator. In this capacity IUCN informed primary stakeholders and exposed them to international meetings on forest governance where government staff could benefit from the experiences of their peers in other countries. IUCN also brought in specific expertise (scientists, policy makers, educators) from its global networks where the process needed it and mediated one-on-one meetings where stakeholders could clarify their positions, thereby avoiding misunderstanding or prejudices.

The multi-stakeholder dialogue resulted in most stakeholders being in favor of negotiating a VPA with the European Commission. The actual discussion of the agreement's details led to new potential conflicts for which a new analysis had to be implemented.

In the end, a common goal was achieved and many changes took place within the stakeholder community, with both stakeholders' positions and level of influence varying throughout the process.

Ghana: Lessons Learned and the Effects of a Stakeholder involvement process

During the five years of the Ghana VPA multi-stakeholder process, many lessons were learned.

All stakeholders recognized that such a process could enhance policymaking by providing additional information on technical, economic and legal aspects of forest governance.

The government now values alternatives to a top-down approach and is interested in exploring how to better engage local communities on topics such as the REDD (Reducing Emissions from Deforestation and Forest Degradation) process.

Government institutions changed their attitudes and practices towards the private sector and civil society, both of which are clearly satisfied that their voice has been heard.

In many NGOs a high degree of professionalism was established and clear areas were defined where they can work with the government.

The importance of informal relationships as a support to the formal process was exemplified. e.g. The official VPA coordinator from the Ghana Forestry Commission formed an informal team with IUCN and Forest Watch to interact on ways to make the formal process run smoothly.

¹ The authors wish to thank Dr. Adewale Adeleke, Director IUCN Ghana and project leader for IUCN during the Ghana VPA Multi-stakeholder dialogues and Ms. Chantal van Ham and Mr. Jean Paul Ledant, members of the evaluation team of the IUCN project, Strengthening Voices for Better Choices, for their valuable comments and text suggestions on the Ghana case.

4.1 STAKEHOLDER ANALYSIS

The term ‘stakeholders’ refers to all individuals and groups of people or organizations that are involved or have an interest in a given issue or project (Kovacs & Rientjes, 2000). As an example of the number and diversity of stakeholders that may be involved in any given issue, Table 1 identifies the stakeholders involved in the Ghana forest governance case study.

A first and essential step in stakeholder involvement is to identify the primary, secondary and tertiary stakeholders:

- Primary stakeholders are those directly affected by the proposed activities; they include:
 - those whose permission or approval of financial support is needed to reach the project’s goals;
 - those who stand to suffer material, social or emotional loss or damage;
 - those who stand to benefit from the project.
- Secondary stakeholders are indirectly affected.
- Tertiary stakeholders are not directly involved, but can influence opinion or facilitate the process.

This *stakeholder analysis* acts as the basis for a process of negotiation, consultation and communication. Not all stakeholders are involved in the process in the same way and to the same extent. Broadly speaking, stakeholders can be divided into four categories, based on their level of support for the project (for/against) and their degree of power over the issue² (e.g. degree of control over land or resources; high/low). The process of engagement that should be followed depends on the category of stakeholder; this is illustrated in Table 2.

Table 2. Stakeholder map. Stakeholders can be separated into four categories based on their support for the issue (for or against), and their level of power/influence over the issue (low/high). Each quarter in the table gives, in italics, an example of a stakeholder from the Ghana case study that falls into that category, as well as the approach to adopt when communicating with that stakeholder.

		Power/influence of stakeholders over issue at stake	
		Low	High
Support of stakeholders for the issue	Against	<i>e.g. Chainsaw operators</i> Inform; try to reduce opposition.	<i>e.g. Timber industry</i> Focus on engaging them; enter into dialogue and negotiations.
	For	<i>e.g. IUCN; NGOs</i> Inform; keep involved; keep motivated; reward support.	<i>e.g. Ministry of Forests; Parliamentary Committee; donors.</i> Engage actively in consultations; use as lobbyists and mediators.

4.2 STAKEHOLDER INTERESTS

Stakeholder interests can be divided into three categories (Rientjes, 2012):

- Material interests (income, value of property, legal position);
- Social interests (power, tradition, status); and
- Emotional/psychological interests (sense of ownership, attachment, memories, values, self-determination, self-image).

With so many competing interests, conflicts between different stakeholders are unavoidable. Conflicts can relate to the issues themselves, the procedure followed, or access to information. In most conflicts, social and emotional issues play an important role. This is certainly true for any issues related to sustainability and environmental management: changes to the way people live and work with the natural environment affect their prosperity and livelihood, and can also affect their identity, their sense of community, and their sense of independence and self-determination. This mix of material and non-material interests makes conflicts concerning sustainability and the natural environment notoriously complex and volatile. Table 3 gives an overview of potential sources and types of conflicts that can occur arising from these diverse interests.

When working to resolve conflicts between stakeholders, a general rule is that the solution to the conflict has to lie in the same ‘sphere’ as the cause of the conflict. Thus, if the basis of the conflict is that the local traditions and practices of a certain group of stakeholders are not respected, then financial compensation alone will not adequately resolve the conflict. If material interests are at stake, at least part of the solution will have to be material, such as offering (financial) compensation.

4.3 AVOIDING AND RESOLVING STAKEHOLDER CONFLICTS: GOOD NEGOTIATIONS AND A CLEAR PROCESS

To avoid or minimize conflicts between stakeholders, engagement begins at the earliest possible juncture, with informing, explaining and educating the stakeholders (at a minimum the primary stakeholders), and extends to negotiating and making compromises.

In managing compromises between stakeholders, Reed (2008) cautions that “...the quality of a decision is strongly dependent on the quality of the process that leads to it” (p.2421). For negotiations to succeed it is necessary that all the stakeholders realize that they are mutually dependent on each other. It is rare that one stakeholder or stakeholder group can impose its wishes on all the others without negative consequences or high costs at a later stage: resource- and time-consuming monitoring and enforcement activities. A negotiated agreement is easier and cheaper to maintain if the parties involved have an interest in its successful implementation.

² This should not be confused with other power differences between stakeholders (e.g. access to financial or political resources). There is a range of techniques a facilitator/mediator can use to counterbalance that.

Table 3. Areas of potential conflict of stakeholder interest, with examples from the Ghana Forest case (after Rientjes, 2012).

Type of conflict	Conflict Sphere	Examples of potential conflicts	Ghana Case
Material or content-related conflicts	Material interests	<ul style="list-style-type: none"> • Access to and control of land, water, or resources; • Possibilities for/restrictions on resource use; • Damage or depreciation of property, loss of income; • Availability/distribution of grants, subsidies, compensation schemes. 	<ul style="list-style-type: none"> • Costs of certification for industry; • New operations procedures for industry; • Subsidies from international donors to facilitate the process; • New strict regulations and governance system for logging; • Role of traditional land owners and Chiefs.
	Procedure/ Process	<ul style="list-style-type: none"> • Room for negotiation/ willingness to negotiate; • Communication (style, language, comprehensiveness); • Participants, representatives; • Timing; • Negotiation skills. 	<ul style="list-style-type: none"> • Willingness to accept committee members not handpicked by government; • Position of IUCN as representative of civil society; • Include the House of Chiefs in the process; • Include more representatives of civil society in steering committee.
	Knowledge/ information	<ul style="list-style-type: none"> • Quality and quantity of information; • Access to information; • Local/tradition knowledge versus formalized knowledge. 	<ul style="list-style-type: none"> • Most of the knowledge was with government, industry had only technical knowledge, civil society had little knowledge.
Social or emotional conflicts	Values	<ul style="list-style-type: none"> • Images/appreciation of nature; • Professional codes; • Local/regional traditions and practices. 	<ul style="list-style-type: none"> • Government believed that a VPA was their responsibility and initially did not see the added value of listening to other expertise and opinions.
	Psychology	<ul style="list-style-type: none"> • Self-determination; • Emotional ownership; • Recognition; • Fear. 	<ul style="list-style-type: none"> • A common ground was the feeling of 'Ghana pride,' the sense of all parties 'we in Ghana can solve this issue'.
	Relationship	<ul style="list-style-type: none"> • History, previous interactions; • Trust; • Stereotypes and prejudices. 	<ul style="list-style-type: none"> • There was in the beginning little trust between civil society and government due to past conflicts about transparency and the collection of taxes from the timber industry.

The Harvard negotiation principles (Fisher & Ury, 1981) elements of good negotiations are based on the:

1. *Separate the people from the problem:* do not make it personal; avoid prejudices and stereotypes.
2. *Focus on interests, not on positions:* Note that stakeholders with opposing positions may have shared interests.
3. *Invent options for mutual gain:* be creative about finding alternatives that will meet the needs/interests of all stakeholders.
4. *Insist on using objective criteria:* jointly formulate criteria for success and use these to assess proposed solutions.

The Ghana forest case experience identified additional criteria, specifically concerning negotiations that involve a wider range of stakeholders:

1. *Engage diverse stakeholders:* ensure that all the relevant (primary) stakeholders are involved in the process and that all sides of the issue are represented.
2. *Set up a good, but flexible structure for process management:* ensure that the process of the stakeholder involvement is set up in advance, but be prepared to make changes as the need arises.
3. *Practice transparency:* make sure all parties understand who is making the decisions, what the decisions are, and the limits to the process (as determined by, for example, the law, democratic processes and government structure).

4. *Use effective communication channels and existing social networks:* identify the stakeholders' existing channels for obtaining, distributing and processing information to ensure information will be delivered in a language and format that is understandable to them.
5. *Be responsive to all concerns.* (Stokes Alexander, 2007)

Potential barriers to participation include varied levels of negotiation skills, information access, status and power. Therefore, support may be needed in the following areas to facilitate active and engaged participation:

- **Strategic communication** may be needed to make stakeholders aware that there is an issue that affects them and encourage them to take part in the negotiation.
- **Training** may be required to enable stakeholders to learn negotiation skills prior to the engagement process.
- **Expert advice and support** may be essential when examining complex, technical, or legal issues.
- **Facilitators** (skilled and impartial) that help to focus, guide, and summarize discussions can make the process run more smoothly.

4.4 CONCLUSIONS

The traditional way to resolve conflicts is through the law. Throughout the world, alternative forms of dispute resolution are becoming more widely used, e.g. mediation, where



the parties involved in a conflict develop their own tailor-made solutions. Mediation as a form of conflict resolution is closely linked to stakeholder involvement approaches. This frequently leads to innovative and creative outcomes that the courts can rarely provide. The mediation process itself can also help to bridge differences between the stakeholders and improve relations, thus decreasing the chance of new conflicts arising in the future.

As illustrated by the Ghana VPA experience, a well-managed stakeholder involvement process has many results beyond a potential agreement or policy. In bringing together stakeholder groups that may normally not be on speaking terms, new patterns of social interaction are formed and the stakeholders are better equipped to resolve any future conflicts of interests. Stakeholder processes can lead to innovative and creative solutions when oriented to processes that encourage learning together. Stakeholder involvement builds a sense of shared ownership of the issues and solutions among the parties involved.

5. MANAGING POSITIVE CHANGE

Managing change for the long-term requires a process that is strategically managed and maintained with discipline. One of the causes for the meagre progress to date in changing societal behaviour in response to the threat of global warming may be the absence of a change management protocol that addresses the societal and individual behavioural changes necessary to deal with any complex issue. This section reviews the reasons for failure in change management, the need for a behavioural component, and reports on an existing protocol.

5.1 WHY CHANGE FAILS

Extensive research concludes that at least 66% and perhaps as many as 90% of all change initiatives fail (Palmer, n.d.; Hannum *et al.*, 2011). This is a sobering statistic for anyone seeking to change organizations, individual behaviours, communities or social systems. Moreover, it is a statistic that appears to have changed little over the last 25-30 years. The first step to managing change is to understand why change initiatives tend to fail.

One three year study (Doppelt, 2003) investigated the failure of 25 public and private organisations to achieve sustainable, “cradle to cradle” production. It concluded that a principal error was attempting to become more efficient within the existing hierarchical and linear business model, failing to recognise that profound cultural and organizational change was required. Consistent with this, a recent study published by the Center for Creative Leadership (CCL) (Hannum *et al.*, 2011) reported that between 66 and 75 % of all public and private change initiatives fail, identifying a resistant organizational culture as the chief cause.

John Kotter (1995) of the Harvard Business School provides one of the more exhaustive and often-quoted research efforts about why change fails. His study, focussed on business organizations, concluded that root causes of the failure include:

- failure to meet expectations of stakeholders;
- ineffective, missing or conflicted leadership;
- lack of well-articulated goals;
- inadequate resources dedicated to change; and
- the complexity of the change management process.

In general, there has been less published on managing change in public or not-for-profit organizations. An exception is an intensive two-year study of large-scale changes in six public and not-for-profit organizations by Kee and Newcomer (2008). That study focused on the role that leaders play in initiating and implementing change. Their findings indicated that most change efforts fail as a result of the shortcomings in change leadership, including:

- Insufficient advocacy for the change;
- Failure to adequately understand their responsibilities in the change initiative;
- Insufficient attention to the complexity of the change and the potential risks raised by the change initiative;
- Inadequate engagement of critical stakeholders;
- Inadequate understanding of the organizational culture in the primary organization or the organizations in the larger system;
- Inadequate appreciation of the organizational capacity needed to implement and sustain the change.

5.2 BEHAVIOURAL COMPONENT

A change management protocol that affects behavioural change must incorporate knowledge from the social sciences as well as the natural sciences. Progress in this direction has been somewhat hampered by a lack of accessibility to research from the social sciences that can help us to understand how to elicit responses to climate changes and promote behaviour changes:

“Despite an increasing awareness that tackling climate change is as much about understanding human behaviour as modelling regional rainfall patterns, most practitioners are unable to access the knowledge that they need. In fact, while interest in the psychology of communicating climate change and promoting sustainable behaviour has grown rapidly among social scientists, the people who engage with the public–environmental campaigners, local and regional government officials or community groups–rarely see the fruits of that labor.” (Corner, 2012, February 17)

Thus, the chain of communication between academics and practitioners is often broken. Certainly, “of all the human

sciences with a potential to contribute to the key task of understanding and informing behaviour change in the environmental domain, psychology – the study of human beliefs and behaviours – has been particularly underused” (Spence & Pidgeon, 2009, p.9).

Nevertheless, a successful change management protocol must incorporate a behavioural component, as the example in the next section illustrates.

5.3 CHANGE ACCELERATION PROCESS (CAP)

The most well-grounded and broadly applicable universal change management process that we know of is the Change Acceleration Process (CAP) developed at General Electric (GE) in the late 1980’s (Von Der Linn, 2009, January 25).

The GE research that underpins CAP found that 100% of all changes considered “successful” had a good technical solution or approach; however, over 98% of all changes evaluated as “unsuccessful” also had good technical solutions or approaches. What differentiated the successful approaches was having a thorough strategy for addressing the “people side” of the equation; that is an organizational and cultural strategy.

CAP was developed to incorporate into its protocol a disciplined integration of the psychosocial issues of change, while addressing the technical or content changes as well. This can be represented by the formula $Q \times A = E$ where **Q** = quality of the technical solution; **A** = acceptance of the strategy and engagement as a result of the cultural and organizational strategy; **E** = overall effect and effectiveness of the change.

CAP represents change as a progression from the ‘Current State’ via a ‘Transition State’ to a ‘Desired State’. It identifies the following necessary conditions for initiating change:

- **Leadership** – a committed leader who ensures that the process has the required resources, publicly supports the change, models desired behaviours and is helpful in overcoming organization resistance.
- **Changing Systems, Structures and Capabilities** – the ability and willingness to redefine fundamental infrastructure, policies, and practices and adjust skills and capabilities to support and drive to the desired state.

When these necessary conditions have been met, there are five essential elements of successful change:

- **Creating a Shared Need** – developing compelling reasons for the change (e.g. a long or short term threat or opportunity) that resonates with all stakeholders.
- **Shaping a Vision** – a clear image of the world after the change should be communicated, that should be widely understood and sufficiently detailed to allow stakeholders to see themselves in the picture.

- **Mobilizing Commitment** – critical stakeholders should be engaged in the actualization of the change (see Section 4, “Engaging Stakeholders”).
- **Making Change Last** – the change must be visible; change-driving strategies should be re-assessed regularly; leveraging early wins is essential; and the process must integrate with other activities and ways of operating.
- **Monitoring Progress and Learning** – measuring progress is crucial: indicators of success such as milestones, benchmarks, future state descriptions, and behavioural cues should be put in place. Experiences and best practices should be communicated widely.

The CAP model highlights the importance of good process design and management of change that incorporates psychosocial components. An essential consideration is understanding and responding to resistance to change. The critical issue in people’s resistance to change is not the lack of attractiveness of the new state; it is inertia or attachment to the current state and the unwillingness to “lose” whatever it provides – familiarity, predictability, stability of relationships, sense of capability and competence. A manager or leader of a change process needs to recognize that there are accompanying emotions and psychological impacts to such loss that must be addressed as part of the process.

6. CONCLUSION

Developing resilient societies and ecosystems is a major challenge, with degraded diversity, overtaxed ecosystems, and the global population heading towards 9 billion by 2050. In times of tighter budgets, it will be even more vital to make strategic investments and ensure a process exists to accomplish conservation and sustainable development goals.

There is information from many fields of social research that needs to be incorporated into these strategies, because in general people respond emotionally and unconsciously, rather than rationally to information about the state of the environment. As noted throughout this piece, new considerations such as developing frames will be essential to helping people to understand the crisis of environmental issues, linking to values that will drive action. Successfully engaging and communicating with policy-makers and other stakeholders requires understanding their interests, constraints, and the processes by which various sectors work. Only then will environmentalists, scientists, conservationists, governments, businesses, and NGOs communicate and engage to identify and develop solutions.

As new pathways to positive change are designed and implemented, those that represent the conservation community will need to become artful, yet ethical, in managing stakeholder processes, negotiations, and managing conflict. The fundamental emphasis of this article is in having an intentional



change strategy for any action be it for biodiversity conservation or resilience. Success will be dependent upon a thoughtful and disciplined approach that must be guided through to its end, considerate of the people and entities that are engaged in the change process.

REFERENCES

- Branson, C., B. Duffy, C. Perry, & D. Wellings (2012). *Acceptable Behaviour? Public Opinion on Behaviour Change Policy*. London: Ipsos MORI Social Research Institute. URL: http://www.ipsos-mori.com/DownloadPublication/1454_sri-ipsos-mori-acceptable-behaviour-january-2012.pdf
- Brown V., M. Keon & R. Dyball (2005). Lessons from the past, learning for the future. In: Keen, M., V. Brown & B. Dryball (Eds.) *Social Learning in Environmental Management Towards a Sustainable Future*, Chapter 14. London: Earthscan.
- Corner, A. (2012, February 17). Bridging the gap between climate change research and practice. *Guardian Professional Network*. URL: <http://www.guardian.co.uk/sustainable-business/climate-change-research-business-practice>.
- Crompton, T. (2010). *Common cause: The case for working with our cultural values*. Research report for WWF-UK's Strategies for Change Project. [No city given]: WWF-UK/COIN/Campaign to Protect Rural England/Friends of the Earth/Oxfam. URL: http://assets.wwf.org.uk/downloads/common_cause_report.pdf
- Doppelt B. (2003). Overcoming the seven sustainability blunders. *The Systems Thinker* 14(5): 2-7. URL: <http://www.greenleaf-publishing.com/content/pdfs/systhink.pdf>
- Feldman P., P. Nadash, & M. Gursen (2001). Improving communication between researchers and policy-makers in long-term care: Or, researchers are from mars; policy-makers are from Venus. *The Gerontologist* 41: 312-321.
- Fisher B. et al. (2008). Ecosystems services and economic theory: integration of policy-relevant research. *Ecol. Appl.* 18: 2050-2067.
- Fisher, R. & W. Ury (1981). *Getting to yes: negotiating an agreement without giving in*. London: Random House.
- Freire P. (1993). *Pedagogy of the Oppressed*. (20th Anniversary ed.). New York: Continuum Books.
- Gallop G.C. (2006). Linkages between vulnerability, resilience, and adaptive capacity. *Global Environ. Chang.* 16: 293-303.
- Gibbons P. et al. (2008). Some practical suggestions for improving engagement between researchers and policy-makers in natural resource management. *Ecol. Manage. Restor.* 9:182-186.
- Greenberg J., G. Knight & E. Westersund (2011). Spinning climate change: Corporate and NGO public relations strategies in Canada and the United States. *Int. Comm. Gaz.* 73: 65.
- Grunig J. (Ed.) (1992). *Excellence in Public Relations and Communication Management*. New Jersey: Lawrence Erlbaum Associates Inc..
- Haid, P., E.C. Marques & J. Brown (1999). *Re-focussing the lens: Assessing the challenge of youth involvement in public policy*. Ottawa: Institute On Governance. URL: <http://iog.ca/sites/iog/files/lens.pdf>
- Hannum, K.M. et al. (2011). *Emerging Leadership in Nonprofit Organizations: Myths, Meaning, and Motivations*. Greensboro: Center for Creative Leadership. URL: <http://www.ccl.org/leadership/pdf/research/AMEXReportEmergingLeadership.pdf>
- Hernandez, M. (2009, December 19). A Conversation with Daniel Kahneman. [Blog post to: "The Inclusive Economy".] Retrieved from: http://cfed.org/blog/inclusiveeconomyconversation-with-daniel_kahneman/
- Hesselink, F.J. et al. (2007). *Communication, Education and Public Awareness (CEPA): a Toolkit for Coordinators of National Biodiversity and Actions Plans (NBSAPs)*. Gland: IUCN.
- Hesselink, F. & J. Zeidler (2012). Chapter 8. Bringing conservation science to life: the role of communication to support policy influencing processes in Africa. In: Davies, J. (Ed.) *Conservation and Sustainable Development*, Chapter 8. Oxon: IUCN/Routledge/IRDC.
- Kee, J.E. & K.E. Newcomer (2008). Why do change efforts fail? What can leaders do about it? *Publ. Manag.* 37(3): 5-12.
- Kotter, J. (1995). Leading Change: Why transformation efforts fail. *Harvard Bus. Rev.* (March-April): 1-10.
- Kovacs, T., & S. Rientjes (2000). A practical guide for communicating nature conservation. In: Rientjes, S. (Ed.) *Communicating nature conservation*, pp.49-94. Tilburg: ECNC.
- Lakoff, G. (2009, May 19). Why environmental understanding, or "framing," matters: an evaluation of the EcoAmerica Summary Report. [Blog post to: Huffingtonpost.] Retrieved from: http://www.huffingtonpost.com/george-lakoff/why-environmental-underst_b_205477.html

- Lakoff, G. (2010). Why it matters how we frame the environment. *Environ. Comm.* 4(1): 70-81.
- Lalasz, R. (2012, March 1). Creating the next conservation movement...or do we even need one? [Blog post to: Cool Green Science (The Conservation Blog of the Nature Conservancy)]. Retrieved from: <http://blog.nature.org/2012/03/creating-the-next-conservation-movement-or-do-we-even-need-one/>
- Leiserowitz, A. et al. (2010). Climategate, public opinion, and the loss of trust. [Working paper, Yale Project on Climate Change Communication.] Retrieved from: <http://ssrn.com/abstract=1633932>
- Lewicki, R.J., B. Gray & M. Elliot (Eds.) (2003). *Making Sense of Intractable Environmental Conflicts: Concepts and Cases*. Washington: Island Press.
- Nisbet, M.C. (2009). Communicating climate change: Why frames matter for public engagement. *Environment* 51(2): 12-23.
- Nisbet, M.C. (2011). *Climate Shift: Clear Vision for the Next Decade of Public Debate*. Washington, D.C.: American University.
- Olson, R. (2009). *Don't be such a scientist. Talking substance in an age of style*. Washington D.C.: Island Press.
- Palmer, J. (n.d). Change management in practice: Why does change fail? [Published online at: ProjectSmart.co.uk.] Retrieved from: <http://www.projectsart.co.uk/change-management-in-practice.html>
- Pew Research Center (2010, June 17). *Obama More Popular Abroad Than at Home, Global Image of U.S. Continues to Benefit: 22-Nation Pew Global Attitudes Survey*. Chapter 8. Environmental Issues. Washington D.C.: Pew Global. Retrieved from: <http://www.pewglobal.org/2010/06/17/chapter-8-environmental-issues-2/>
- Reed, M.S. (2008). Stakeholder participation for environmental management: a literature review. *Biol. Conserv.* 141: 2417-2431.
- Rientjes, S. (2002). Making nature conservation modern. *J. Environ. Pol. Plann.* 4: 1-21.
- Rientjes, S. (2012). Conflicten rondom het beheer van natuurgebieden. [Conflicts concerning the management of nature areas.] *Tijdschrift voor Conflicthantering [Journal of Conflict Management]* 7(1): 10-15.
- Shellenberger, M. & T. Nordhaus (2004). *The Death of Environmentalism: Global Politics in a Post-Environmental World*. [No city given]: Breakthrough Institute. http://www.thebreakthrough.org/PDF/Death_of_Environmentalism.pdf
- Spence, A. & N. Pidgeon (2009). Psychology, climate change & sustainable behavior. *Environment* 51(6): 8-18.
- Spierenburg, M. (2012). Getting the message across: Biodiversity science and policy interfaces – a review. *GAIA* 21(2): 125-134.
- Stokes Alexander, S. (2007). IUCN Report on multi-stakeholder consultations for the Ghana EU VPA negotiation process. Gland: IUCN.
- Susskind L. (2009). Deliberative Democracy and Dispute Resolution. *Ohio State Journal on Dispute Resolution* 24(3): 1-12.
- United Nations Secretary General's High-Level Panel on Global Sustainability (2012). *Resilient People, Resilient Planet: A future worth choosing*. New York: United Nations. Retrieved from: http://www.un.org/gsp/sites/default/files/attachments/GSP_Report_web_final.pdf
- UNWCED [United Nations World Commission on Environment and Development] (1987). *Development and International Co-operation: Environment*. Report of the World Commission on Environment and Development. Document A/42/427. Retrieved from: <http://www.un-documents.net/wced-ocf.htm>
- Von Der Linn, B. (2009, January 25). Overview of GE's Change Acceleration Process (CAP). [Blog post to: Bob Bon Der Linn's HPT Blog.] Retrieved from: <http://bvonderlinn.wordpress.com/2009/01/25/overview-of-ges-change-acceleration-process-cap/>
- Zeidler, J. (2009). Some thoughts on policy and desertification: what key contributions can scientists make to policy processes in our southern African context? *African Journal of Range and Forage Science* 26(3): 149-157.