Coastal Communities 2150

shaping our future by the coast

Engaging Coastal Communities in Climate Mitigation and Adaptation Measures – a review of relevant psychological science

Phase 1 Report

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1. Introduction

Rising sea levels, an increased risk of flooding and extreme weather events, salinisation, and changes in coastal and estuarine ecology put coastal communities at the forefront of climate change. The Coastal Communities 2150 initiative is designed to help these communities meet the challenges confronting them through a process known as community engagement. Community engagement involves the building up of enduring relationships within a community, and between a community and external authorities. Community engagement acknowledges that neither communities nor authorities possess complete knowledge of the problems that communities face and the means by which they might be solved. Rather, it involves a two-way exchange of information between communities and authorities, which enriches both parties' understanding. Community engagement enables local people to act collectively to identify challenges and opportunities. It also enables them to respond effectively, by themselves, in partnership with authorities, and by making appropriate demands of authorities (Perrin, 2006; Rowe & Frewer, 2005; Schoch-Spana, Franco, Nuzzo & Usenza, 2007).

In this report, "community engagement" is distinguished from what is often termed "engagement", and which we shall refer to as "individual engagement". This refers to individuals' state of personal connection with the issue of climate change. As Lorenzoni, Nicholson-Cole, & Whitmarsh (2007, p. 446) put it, "it is not enough for people to know about climate change in order to be engaged; they also need to care about it, be motivated and able to take action". It is clearly easier to engage communities if individuals within them are engaged. However, the engagement of communities requires the accumulation of enduring social networks, and good will. It can also be derailed by processes associated uniquely with co-operative group life, such as dissent and dissolution, even if a significant number of individuals remain engaged.

Community engagement would seem to be a promising approach to coastal communities as they look to build resilience to the challenges facing them in and future generations (e.g. Few, Brown & Tompkins, 2007; Gurran, Hamin, & Norman, 2008). However, processes of community engagement tend to meet with some resistance. People living in coastal communities may have developed a strong sense of identity and attachment with the place in which they and their families have lived. As a result, they may find any proposal to change any of the social and physical features of their environment to be threatening and intrusive (Bonaiutoa et al., 2002; Dixon & Durrheim, 2000).

Further barriers are likely to arise when the motivation for community engagement is to help local communities deal with climate change. In contemporary Western cultures, climate change is associated with uncertainty and controversy. Vested

interests in the media and politics also mean that climate science is presented in misleading and conflicting ways, eroding confidence and clarity in public opinion (Minozzi, 2011).

As a very large scale and long-term problem, climate change elicits both denial and fatalistic resignation (e.g., Stoll-Kleeman et al., 2011). Thus, climate change does not pose only an economic and ecological threat. It is also a psychological threat, with the potential to disrupt citizens' well being and sense of community. This means that attempts to engage coastal communities are likely to confront a range of psychological barriers. These barriers may demotivate large sections of a community, and may motivate a small section of the community to vociferously and determinedly oppose the community engagement process.

This report reviews the psychological barriers to community engagement as envisioned in the Coastal Communities 2150 project. In the first section, we outline the psychological obstacles to realistic responses to climate change. These psychological obstacles operate at the level of the individual, who may be led into denial or inaction. They may also affect the responses of social groups and communities to climate change. In the second section, we focus on the barriers to community engagement in light of these psychological processes. Throughout these sections, we highlight some implications for good practice in community engagement.

In section four, we highlight these and some other general principles that may be useful to partners as they seek to formulate best practice in their communities of interest.

2. The psychology of climate change: Barriers to individual engagement

Obviously, engaging coastal communities requires that individuals in those communities are engaged. It is therefore necessary to take into account the psychological factors that deter individuals from engaging. Going further, the relationship between individual and community engagement is complex, intimate, and works in both directions. A fundamental principle of social psychology is that individuals are shaped by the communities to which they belong (Tajfel & Turner, 1976; Yzerbyt & Demoulin, 2010). The decisions that individuals make will be informed by the leadership and norms of their local community. If the community begins to engage, then individuals within the community will have more opportunities to engage, and will be more inclined to do so. Individuals are also informed by the extent to which their communities appear to be cohesive, sufficiently resourced, respected, and well-treated.

In this section, we review various barriers to individual engagement. The section progresses from the most private, "in the head" barriers, such as individuals' concerns with their autonomy and control, happiness, and self-esteem, through to increasingly social barriers associated with concerns that people have about their reputation, and the norms, continuity and status of their community.

2.1 Short-termism and localism

People have evolved with a flexible intelligence that can be applied to many problems. However, evolution has also left us with certain biases in decision making. Like other animals, we are oriented to take opportunities and avoid hazards that are in our immediate environment: close to rather than distant from us spatially, and in time. We are also oriented to solving problems by ourselves or in small groups. Historically, as a species we have been less able to solve problems that involve large-scale social co-ordination and very-long-term planning. In principle, the massive scale and timeframes that climate change entails therefore present a psychological barrier to individual engagement (van Vugt, 2007).

As a result, in most communities there will be a significant minority of people who will not be motivated to participate in community initiatives. Awareness of the longer term risks, such as the incremental effects of gradual sea level rise on the shoreline, may not be sufficient to spur people into action. Nonetheless, the inherently localistic approach of the Coastal Communities 2150 project means that the problems presented by climate change can at least be put into a specific, local context (cf. Few, Brown, & Tompkins, 2007a). There are quantifiable risks that a building will fall into the

sea, or that flooding will increase, for example. People are generally more motivated by this kind of specific, local risk (Schiermeier, 2004).

Recommendation for practice

Community engagement should, and generally does, involve a process by which *short-and medium term,* local risks presented by climate change are identified (e.g., Gurran et al., 2008; Milligan et al., 2009).

Of course, the very nature of the Coastal Communities project requires that change and risks over the long term are focal. Without such a long term focus, there is a danger that community action will be oriented towards the prevention of changes that may be avoidable in the short-term but inevitable in longer timescales. (e.g. the subsumation of some coastal wetlands). In this case, it is likely that best practice will be to present the time course of progression through the short and medium term to the possible longer term future. Further, a problem with the distant future is that people tend not to conceptualise it in concrete detail. This feature of so called “temporal construal” means that desired and feared outcomes are less likely to motivate action when they are in the distant future (Trope & Lieberman, 2003; 2010). Making them concrete helps to overcome this problem, especially when this is done in ways that elicit an emotional or visceral response. For example, pictorial stimuli rather than text-only descriptions are often more vivid and elicit stronger emotions and motivations (Hsee & Rottenstreich, 2004).

Recommendation for practice

Scenarios regarding the distant future should be described in as concrete, detailed and vivid a way as possible.

2.2 Autonomy and control

Individuals strive to achieve a sense that they have control over events in their lives and are acting autonomously. When they feel that attempts to influence them threaten their autonomy, they often react in unintended ways, including *reactance*. Reactance occurs when people change their behaviour in exactly the opposite way to that intended (Brehm, 1966; Liu et al., 2012). Further, even when people change their behaviour in the expected direction, behaviour change is less likely to be sustained if people do not feel that they have done so autonomously. Climate change also presents a set of problems that are outside of the control of any one individual or community, and may therefore produce motivated denial.

Recommendation for practice

Partner organizations should present a good rationale to local people for their engagement, to suggest how engagement allows them to be more effective in meeting their own goals and challenges, and provide them with options for engagement that they can choose.

Rewards, punishments, or imposed rules may not produce long-lasting or generalized changes in behaviour, if used by themselves or without care to the threat it appears to pose to autonomy (Deci & Ryan, 2000; Pelletier & Sharp, 2008).

2.3 The pursuit of happiness (and the avoidance of negative emotions)

Attempts to engage individuals with climate change have often used fearful imagery, but these "fear appeals" in general do not appear to be effective (O'Neill & Nicholson-Cole, 2009). Fear, anxiety and negative mood are aversive states from which people seek to escape. One of the most influential models of behaviour change in response to public campaigns (Maddux & Rogers, 1983) suggests that the psychological threat presented by fear appeals can result either in a precaution or a hyperdefensive strategy. In other words, fear appeals can lead people to change their behaviour in order to reduce the risk (precaution strategy) or to deny or ignore the problem (hyperdefensive strategy).

Research on health and drink-driving campaigns shows fear, especially strong fear, to be an important component of successful appeals (e.g., Rogers, 1975; Witte & Allen, 2000). In a much-cited review of health promotion campaigns, Soames (1988) argued that fear campaigns are more effective when a specific, desired behaviour is presented, which promises to reduce fear. Given the public controversies surrounding climate change, and the perceived inability of any one individual to reduce the risks entailed by climate change, it is all-too easy for individuals to slip into the hyperdefensive strategies of denial and avoidance.

Recommendation for practice

In the case of coastal communities, acknowledging feared possibilities may, in some cases be an effective part of a communication strategy. An example of this may be if the fear is specific, regarding the loss of a local landmark or building due to coastal erosion. Another may be if a clear path of action appears to be available where that loss may be avoided.

2.4 Self-esteem

High self-esteem is a cherished psychological state that people defend. A recent study showed that young Americans liked and valued experiences that boosted their self-esteem, such as compliments, more highly than getting paid, eating their favourite foods, and their favourite sexual activity (Bushman et al., 2011). According to moral disengagement theory (Bandura, 1999; 2007), climate change threatens the self-esteem of reasonably affluent Westerners by placing them in a “moral predicament”. On one hand, they naturally wish to pursue the comfortable and rewarding living standards that are available to them. In doing so, their behaviour contributes to the problem of climate change. Since most people have broadly pro-environmental values, this behaviour is not in keeping with their moral standards. If they become aware of this discrepancy, their self-esteem is threatened.

To escape this moral predicament and protect their self-esteem, some people may change their behaviour. More commonly, however, they may choose not to escape the predicament by morally disengaging from their own behaviour. One tactic of moral disengagement is denial and minimisation of climate change. This point is illustrated by a recent study run in the UK (Sparks et al., 2010). A control group of participants read messages which denied climate change. An experimental group read the same messages, but first had an opportunity to boost their self-esteem by recalling instances in which they had been kind to others. After reading the denialist messages, the experimental group who had undergone the self-esteem boost were substantially less likely to deny climate change than the control group who had not had this opportunity. This suggests that when people feel their self-esteem is robust and not threatened by climate change, they are less likely to deny the problem. When their self-esteem is more fragile, they are more likely to go into denial.

Some of our work (Sutton, Calogero & Sibley, unpublished) points to a similar conclusion. Participants were asked to indicate the psychological consequences of accepting that the earth’s climate is warming, due to human activity, with potentially serious consequences. Participants indicated that people who believe in this hypothesis have lower self-esteem, a lower sense of control, more negative emotion and uncertainty than those who deny it. The more participants thought that accepting the climate change hypothesis was damaging to self-esteem, the more they tended to deny it.

Denial of climate change and its consequences is not the only tactic of moral disengagement. People justify their own inaction by pointing to token efforts that they take, by fabricating impediments to action (e.g., “I don’t have the time to take public transport”), and by appealing to their own ignorance (Stoll-Kleeman et al., 2001). They also invoke the feeling that their own actions are a drop in the ocean, that climate change is a distant threat, and that they have more pressing priorities (Lorenzini et al.,

2007). When self-esteem is threatened, for example by feedback that one's energy use is higher than average, positive behaviour changes can follow (Schultz et al., 2007). However, if people cannot see how to engage constructively with climate change in a way that preserves or restores their self-esteem, denial and inaction will more likely result.

Recommendation for practice

Although threatened self-esteem may motivate action, when the possibility of constructive action is not immediately apparent, denial and inaction are probable. Therefore, information that threatens self-esteem should be accompanied by clear & convincing information about how behaviour can be modified.

2.5 Reputational or "face" needs

Our self-esteem is closely tied to the extent to which we are accepted and valued by others. People are concerned to preserve a positive, respected, dignified public persona or "face" (Goffman, 1960). If people feel their choices as consumers, workers and citizens are being criticized, or that they are being pressured or hectored into changes, then they will tend to feel that they are being treated with a lack of dignity and respect. This can lead to angry and defensive responses. In their focus group studies, Stoll-Kleeman et al. (2001) found that participants would sometimes engage in a strategy they termed *condemn the accuser*: asserting that others have no right to challenge or criticise their behaviour.

Importantly, people are quick to react with anger and denial to criticisms of their group -for example, their national or age groups. This is especially true when the criticisms originate from people outside, rather than inside, their group. For example, Australians are more likely to get angry and to deny the truth of criticisms of Australia -the very same criticisms -if they are voiced by an English or Canadian person, rather than a fellow Australian (Hornsey et al., 2002; Sutton et al., 2006). This barrier to individual engagement is especially important to community engagement. If people feel that their community is being criticized from outside, they are less likely to engage.

Recommendation for practice

Avoid seeming to be critical or overly prescriptive with advice. Provide a framework within which members of the community feel able to voice criticisms and suggestions regarding local responses. These are more likely to be seen as an appropriate basis for constructive action.

2.6 Perceived community disengagement

Just as people are concerned with how others see them, they also look carefully at the behaviour and apparent values of others. One reason they do this is to evaluate themselves, in a process known as s*ocial comparison* (Festinger, 1954; Spence, 2011). Ordinary people do not have ready access to objective standards by which they can determine how "engaged" or "environmentally responsible" they are. In the absence of these standards, people compare their behaviour with that of others in their community. It follows that if people do not see their neighbours engaging with climate change, they will conclude that they are personally engaged in relative terms and are likely to feel less impelled to take action (Nolan et al., 2008). Further, the behaviour of one's neighbours, community groups, and leaders in the community signals to people what the *norms* of the community are. People are much more inclined to engage if they believe that others have. In part this arises from a deep-seated human tendency to conform to norms (Kerr, 1995; Terry & Hogg, 2001; Schultz et al., 2007). But also, it can be seen as a quite reasonable perception that climate change demands a collective response, meaning that purely individual action is likely to be futile (Lorenzoni et al., 2007).

In general, the lack of community engagement in contemporary Western societies creates a vicious circle, demotivating individuals from engagement. In turn, this individual apathy undermines community engagement, and so on. The lack of apparent engagement by others may lead people to underestimate the extent to which their neighbours are concerned and prepared, in principle, to act. The illusion that the self but not others are concerned is known as pluralistic ignorance (Latané & Rodin, 1969; Prentice & Miller, 1996).

Recommendation for practice

Although the apparent absence of community engagement presents a very strong psychological barrier to individual engagement, good practice may be applied to undermine this vicious cycle and turn it into a virtuous one. If individuals and communities are encouraged to make their engagement visible, this is likely to signal a positive change in community norms and standards.

2.7 System justification.

For various reasons, people are motivated to justify the social systems they inhabit and to oppose changes to them. We depend on social systems for our survival, to help us understand the world in which we live, and to provide us with shared experiences with others. Anthropogenic climate change presents a profound challenge to the legitimacy of current social systems, because they are responsible for environmental

degradation. Thus, Americans who strongly believe in the essential justness and rightness of their society are more likely to deny climate change and to be uninterested in changing their behaviour (Feygina, Goldsmith & Jost, 2010). The tendency to justify the social and economic status quo, whether at an international, national, or local level, presents a psychological barrier to change.

Recommendation for practice

Good practice may overcome this barrier by presenting community engagement, mitigation and adaptation as activities designed to protect current ways of life from changes that would otherwise occur.

2.8 Threat appraisals

A theme common to the psychological barriers we have outlined here is that climate change is widely perceived as a threat: be it to one's self-esteem or to the contemporary way of life. In research on stress and coping, threat perceptions are defined as perceptions that an event is aversive, obstructs important goals, and that preventing, avoiding, or managing the implications of the event is beyond one's resources. The same event, however, can be appraised differently: as a challenge. A challenge appraisal arises when people feel they have the resources to cope with the event (Tomaka et al., 1997). Threat perceptions lead to anxious emotions, unhealthy physiological responses, and maladaptive responses such as denial and avoidance of the problem (Lazarus, 1991; Lazarus & Folkman, 1984). Challenge perceptions do not, and instead lead to attempts to approach and solve problems. So, people who perceive events as challenging rather than threatening are much more resilient to stress and cope more effectively. Because climate change seems too large for people to deal with, it is widely construed as a threat (Doherty & Clayton, 2011). Many of the psychological barriers that we have reviewed spring from this fundamental problem in the way that people think about climate change.

Recommendation for practice

In principle, interventions such as the Coastal Communities 2150 project are an antidote to threat appraisals and encourage challenge appraisals by focusing on local, solvable challenges. Good practice will encourage communities to construe local problems as solvable challenges rather than insoluble threats.

However, it is to be borne in mind that the Coastal Communities 2150 project is being initiated in a cultural environment in which climate change is threatening, rather than challenging. Some individuals in each community will continue to construe climate change as a threat.

3. Barriers to community engagement

As we have noted, all of the barriers to individual engagement that we have reviewed comprise, by definition, barriers to community engagement. However, some new barriers emerge when efforts are made to engage groups of people, such as coastal communities. We review some of the key ones in this section.

3.1 Group polarisation

When like-minded individuals come together to make decisions as a group, their initial views tend to become magnified. Decisions made as a group tend to be more extreme than those made as an individual (Isenberg, 1986; Myers and Lamm, 1976). Thus most individuals in a community are disengaged, then when they make decisions as a collective, they may be even less engaged. Conversely, group polarisation is a boon, not a barrier when there is widespread desire within a community to engage. Even when there is not, the prospect of acting together as a group, and focussing on local, solvable problems, may help to convert threat perceptions to challenge perceptions, so counteracting the negative effects of group polarisation.

Recommendation for practice

Gain some sense of the local norms of a community and to be sensitive to this in the establishment of community engagement. Community representatives who are engaged with climate change are likely to want to assume influential and leadership roles (but see 3.5 below), and should be encouraged in doing so.

3.2 Social loafing and diffusion of responsibility

In a tug of war, people exert less force when in a one-on-one battle with another person. This phenomenon is known as social loafing. In general, people are less likely to step forward to help when they believe that others are equally or more as responsible for doing so. This is known as *diffusion of responsibility*, and explains cases in which bystanders fail to help people in distress in crowded urban situations (Darley & Latané, 1968). Collective effort is undermined by individuals' perceptions that other people will do the work, and that less is therefore required of them.

Recommendation for practice

Ensure that individuals are assigned clear roles within the collective effort, and so feel accountable for their work, do not assume that others will do some of it for them, and potentially see their work as a source of individual pride and esteem.

Recent research (although not specifically dealing with climate change) suggests that diffusion of responsibility effects can be eliminated if there is a clear norm of engagement within a group (Levine et al., 2002; Levine & Crowther, 2008; Manning et al., 2007). Thus, ensuring that the engagement efforts of the community and of key individuals are well publicised will also be helpful insofar as it helps to establish a norm of engagement (see 2.6).

3.3 Trust and justice concerns

A long tradition of research in social psychology has established that justice is very important to human beings. People are more likely to obey authority, engage in extra-role or voluntary behaviours, and to commit to groups if they feel that they are treated fairly (Tyler, 2000). Trust is intimately connected with justice. Perceived injustice will arise if community members feel unfairly excluded from community engagement processes, feel that vested interests are hijacking these processes for their own benefit, or otherwise feel that these processes inflict costs and distribute benefits in an unfair manner. Participants in a community engagement project in the UK were found to be very concerned with justice, equity and fairness throughout the project (Milligan et al., 2009).

Recommendation for practice

Ensure that all members of the community have some means of expressing their view and that all decisions are made fairly.

3.4 Attrition and dissolution

A major psychological barrier to community engagement is the inherent impermanence of human groups. For many reasons, groups routinely break up and dissolve (Levine & Moreland, 2004). For example, disagreements and interpersonal conflicts may emerge (Moll & Schulkin, 2009), key personnel may become unavailable or lose motivation; lines of accountability may blur; groups may feel that they are not sufficiently valued (e.g., van Vugt & Hart, 2004). A notable limitation of many studies of community engagement thus far is that they do not involve follow-up evaluations to determine whether engagement groups are still functioning several years after the intervention has commenced.

Recommendation for practice

As much as possible, establish engagement processes within community institutions as soon as possible. It may be risky to rely solely on the formation of ad-hoc engagement groups without (a) carefully integrating them into enduring community institutions, and (b) ensuring case management by authorities involving regular communication.

Good practice will ensure that engagement groups feel valued and are well structured to ensure strong lines of accountability and resilience to losses and changes of personnel. One way to do this is to establish a temporary working group that reports to local decision-making bodies, and which has a key remit the establishment of engagement work within established structures.

3.5 The political imperative: trolling, infiltration, and negative publicity

Much of the literature on the psychology of climate change discusses a value-action gap. The majority of individuals essentially accept that the world's climate is changing because of human activity, but only a minority of those people take the concerted action that these beliefs suggest are appropriate. Individuals who do not accept anthropogenic climate change also choose whether or not to act on their scepticism. Our search of the literature has not uncovered any research on the probability that people with sceptical beliefs will take action to resist attempts at mitigation and adaptation. However, there is evidence of a concerted effort by sceptics, some funded by oil interests and related industries, to create doubt and undermine engagement (Jacques et al., 2008; Minozzi, 2011). A famous example is by Luntz (2002), a pollster who at the time was in the employ of conservative political interests in the US:

> *"Voters believe that there is no consensus about global warming within the scientific community. Should the public come to believe the scientific issues are settled, their views about global warming will change accordingly.... The scientific debate is closing (against us) but... there is still a window of opportunity to challenge the science. You [the sceptic] need to be even more active in recruiting experts who are sympathetic to your view, and much more active in making them part of your message".*

Whether as a result of the kind of co-ordinated, energetic effort to sow doubt that Luntz proposed or not, media coverage is strongly skewed toward climate scepticism, relative to scientific data (Freudenberg & Muselli, 2010). Editorials in the US media tend to suggest that prevailing scientific estimates are unduly pessimist and surrounded by uncertainty. In contrast, Freudenberg and Muselli (2010) found that

indeed, scientific findings reported in newspapers disagreed with the International Panel in Climate Change (IPCC) consensus about the magnitude of climate change. However, for every one finding that suggested the IPCC estimate may be too pessimistic, 20 findings suggested that it is too optimistic, and that climate change is more rapid than officially thought.

Although it is not yet known whether individual sceptics at the level of communities are likely to act alone or in a coordinated way to undermine community engagement, it is a possibility that needs to be considered. The scientific consensus as embodied by the IPCC is clear, backed by thousands of studies, and may if anything underestimate the problem. In our opinion, there is little point in engaging with perspectives that deny the problem. Doubt about attitudes erodes the motivation to act in accordance with them (Petty & Briñol, 2008).

Recommendation for practice

Those responsible for encouraging community engagement should be aware of the possibility that sceptics in the community will attempt to resist the process.

In some cases it may be helpful to point out that the climate of the planet has indisputably warmed over the last century by over 1 c, and that sea levels have risen in that time by 20 cm. Regardless of the cause of these phenomena, they require action from coastal communities.

4. Suggested principles of best practice

As we have identified some of the key psychological barriers to community engagement, we have drawn out implications for good practice as we see them. These implications are meant as guidelines only, and should not be interpreted as hard-and-fast rules. Neither will all of them be relevant, necessarily, to all of the initiatives of every partner organisation. So, intentionally, they are not specific about how community engagement is achieved. Naturally, these decisions are best made by partner organisations who are sensitive to the particular issues of their communities and the resources at their disposal. However, what we have tried to do is to distill some general principles that are worth bearing in mind as engagement strategies are developed.

We summarise these implications in this section, and add to them some additional observations that spring from reflective evaluations of community engagement projects by non-psychologists. To make them easier to digest and apply, we have organised them into a smaller set of general principles.

4.1 Make the future now

Given the psychological difficulties in being motivated to deal with distant futures that seem vague and abstract, it is important that engagement strategies attempt to bring these futures to life. This might involve:

- The presentation of short and medium term, local changes associated with climate changes as a bridge to longer term changes.
- The use of vivid, detailed, and where possible visual representations of distant futures.
- Encouraging communities to relate their adaptation and mitigation plans to their existing goals, since these goals might also have involved detailed planning (this also helps foster a sense of responsibility and autonomy).
- Encourage communities to commit to specific rather than abstract plans.

4.2 Frame positively

Climate change often presents as a psychological threat: a negative event which seems uncontrollable and discourages action. It is possible to encourage people to think of it instead as a challenge; a process about which they can do something. Challenge appraisals are much more likely to motivate action. It is important that engagement strategies foster a sense of controllability, and even optimism to help communities perceive changes as a challenge rather than a threat. This might involve:

- Stressing that adaptation and mitigation actions are often about preserving valued features of the local environment and community life, rather than changing them. These actions could be framed as ways to pursue the pre-existing goals of the community.
- Where possible, encourage communities to frame their goals as striving towards gains and desired outcomes rather than avoiding losses or feared outcomes.
- Focus action on specific, local challenges, and discourage concern or rumination about the wider or less controllable aspects of climate change.
- Point out the psychological and social benefits that flow from the co-ordination of communities; encourage community groups to advertise their plans and achievements.
- Avoid criticism and discourage guilty feelings, although “internal” criticism from within the community may have more constructive consequences. Where criticism or reduced self-esteem is likely, encourage the formation of specific actions to remedy the problem.

4.3 Encourage self-organisation and autonomy

This is a central notion already in the concept of community engagement, because the process equips communities to act in their own interests. A number of psychological and social benefits flow from being part of an effective group (Tajfel & Turner, 1976). These are likely to feed back positively into the process of community engagement. To facilitate this, partners might:

- Encourage the granting of leadership roles to engaged individuals.
- Encourage the assignation of clear roles to individuals, so that each person understands what they are accountable for.
- Try to ensure that all community members, even those without designated roles or who may not be engaged, have a voice and that decisions are made fairly within the community, rather than being subject to vested interests.
- Given the inevitability of denial and dissent, not all members of the community should be able to delay or veto the proposals.
- Encourage communities to link their community activities to established decision making structures such as local councils, so that engagement is less likely to cease when personnel change.
- Adopt a case management approach to monitor the continuity and activity level of engagement groups.

4.4 Be a partner

Community engagement describes processes not only within a community but also its relationship with external agencies. An excellent case study is provided by Milligan et al.'s (2009) evaluation of Natural England's attempt to engage the community of Winterton-on-Sea, a village of some 1500 people on the Norfolk coast, in coastal conservation work. In early 2005, a "Winterton Liaison Group" was formed of landowning interests, statutory and non-statutory bodies, and community representatives. It met four times in the year to discuss coastal defence and sustainability, recreation and public amenity issues, recreation and wildlife issues, and tourism and cultural heritage. The case study highlighted some expectations and needs of communities in relation to external agencies.

One concern expressed by community members in the process of focus group evaluations was that participants did not feel that they were sufficiently supported by experts in decision making; notably, experts who could provide direction on the likely shape of the coast, and what technical solutions were possible. Another problem was that community members found it difficult to make their own plans when wider environmental and fiscal policies were themselves in flux. A third lesson, notwithstanding our points above about the dissoluble, temporary nature of ad-hoc groups (under 3.4), is that members of these communities who were already politically active tended to be inflexible. This highlights the need for leadership roles to be given to engaged individuals, even though the longevity of engagement probably depends on integration with enduring local structures and institutions. From this case study and the psychological principles established in this literature review, we can recommend:

- A close contact or case management approach.
- Sparing and tactful application of advice, criticism or praise.
- Advising the communities about the policy environment so that their decisions are taken in light of what is possible.
- Providing technical advice to communities or referring them to it.
- Doing anything possible to ensure that communities' decisions inform policy.

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Coastal Communities 2150 (CC2150) is a project part-funded through the INTERREG IV A 2 Seas Programme developed to address coastal change through engaging communities or sectors at long-term risk and supporting locally developed responses. CC2150 unites people and organisations across the UK, Belgium and the Netherlands with the aim of helping communities develop local visions and action plans to decrease their vulnerability and increase resilience to future climate and coastal change.

Why 2150? Why communities? By working to a long-term time frame, we aim to see the wider implications of coastal change, rather than seeing only the immediate concerns. Effects of climate and coastal change are already being felt by residents around our coastlines and this project aims to help communities maximise the opportunities and minimise any risks associated with these impacts. We know that the social, economical and environmental costs of acting now to address change are far less than if we take a purely reactive position.

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