

# **Social Barriers to Adaptation: Exploring Implications and Identifying Options for Adaptation Policy across the SADC Region**

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## **3.1 Introduction**

The impacts of climate variability and change are already being felt across much of southern Africa and are projected to intensify over the coming decades. The various threats, coupled with wider development pressures, are also likely to exacerbate already complex socio-ecological relationships. With this in mind, for many people and communities across the Southern African Development Community (SADC) region adaptation is not an option but a necessity. In trying to facilitate successful adaptation at various levels, governments need to be aware of the various obstacles that exist. In the SADC region, financial, informational and natural limits to adaptation act as serious hurdles to the implementation of sustainable adaptation policies, each of which is fairly well documented. However, social and cultural barriers to adaptation have been given little in the way of attention so far, and have not been well researched.

This chapter explores the influence and implications of social barriers to adaptation, using insights drawn from recent literature and field studies across Africa. It highlights the roles of social institutions in influencing how individuals choose and are allowed to respond to climate shock and stress within Southern African communities, and examines how restrictive social environments can prevent successful adaptation. Finally, it provides recommendations for adaptation policy to address and overcome social barriers to adaptation for Southern Africa.

## **3.2 What are social barriers to adaptation?**

It is easy to assume that, when faced with a threat to one's livelihood, an individual will make rational decisions based on a clear hierarchy of structured and rational preferences. Yet, evidence from various fields of the social sciences tells us that the influence of social structures and characteristics – such as social norms, institutions and perceptions – can play a large role in determining people's decision making. Indeed, research into natural-resource management shows that 'barriers to community or individual action do not lie primarily in a lack of information or

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<sup>1</sup> Published as Chapter 3 in Masters, L., & Duff, L. (Eds.). (2011). *Overcoming barriers to climate change adaptation implementation in Southern Africa*. African Books Collective.

understanding alone, but in social, cultural, and institutional factors'.<sup>1</sup> This is also the case for adaptation, and how an individual may choose to adapt – or not to adapt – to perceived threats relating to climate variability and change. With this in mind, individuals need not only knowledge on how best to cope and adapt, but also the motivation, the right institutional environment and the entitlement to do so.

This chapter is concerned with the social and cultural processes that govern how people react to climate variability, whether this is in the form of prolonged drought, heavier and more uncertain rainfall or changes in seasonality and temperature. In their simplest form, social barriers relate to the social characteristics that prevent individuals or groups from seeking the most appropriate and logical forms of adaptation action. Within this group are cognitive, normative and institutional barriers, each of which plays a large role in influencing, and in some cases restricting, the options available for adaptation and the adaptive capacities of particular groups and communities (see Table 3.1 for examples of each).

Institutional barriers to adaptation relate to the structure and governance of institutions in terms of influencing how individuals are allowed to respond to climate variability and change. In this chapter, institutions are taken to represent the 'rules of behaviour' that govern belief systems, norms and behaviour, and organisational structure.<sup>2</sup> Social institutions can be both formal and informal in nature, and are very diverse in their appearance. Examples are local farmers' collectives, collective ownership rights and tribal rights and customs, each of which has its own sets of rules, both formal and informal.

Local institutions have three main roles in adapting to climate variability and change, and determining levels of vulnerability. Firstly, they structure impacts and vulnerability; secondly, they mediate between individual and collective responses to climate impacts and thereby shape the actions taken to adapt; and, thirdly, they act as the primary means of delivery of external resources to facilitate adaptation, and, therefore, govern access to such resources.<sup>3</sup> For example, institutional characteristics relating to self-determination, participation in decision making, access to financial and technological support and entitlements to education, information and health services all play a large role in either enabling or restricting the actions an individual is permitted to take in responding to shock and stress.<sup>4</sup>

Cognitive barriers are concerned with the psychological processes that influence how individuals choose to react in the face of existing or anticipated climate variability or change. People's perceptions and cognitive reactions to threats can range considerably from denial and apathy to helplessness, uncertainty and acceptance. These thought processes – often influenced by local beliefs and customs – can play a large role in determining how people choose to react in the face of climate variability and change. For example, research into extreme weather conditions suggests that women perceive hot and dry summer weather more unfavourably than men, and are, therefore, more likely to change behaviour.<sup>5</sup>

Normative barriers are associated with how cultural 'norms' influence people's actions in response to perceived threats to livelihoods. This chapter takes norms to be the 'dos and don'ts' involved in particular situations.<sup>6</sup> These shared values and understandings overlap strongly with institutional rules, and can be seen in the form of, for example, religious and tribal belief systems;

rituals; customs; or restrictions in livelihood practices and dietary options. Although not normally considered concrete barriers, behavioural norms can play a large role in influencing the decisions taken to adapt to climate variability and change.

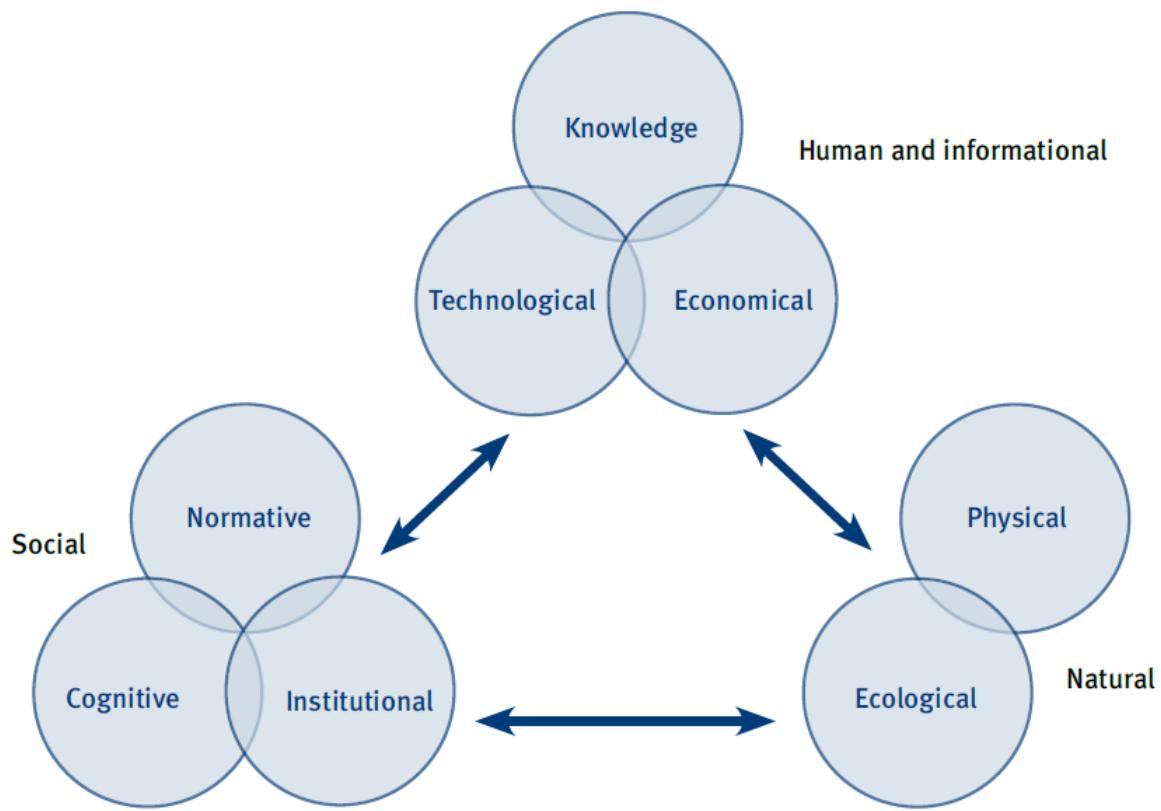
**Table 3. 1 Illustrative examples of social barriers to adaptation**

<b>Social barrier</b>	<b>Illustrative examples</b>
Cognitive behaviour	<ul style="list-style-type: none"> <li>○ Belief that uncertainty is too great to warrant taking adaptation action now</li> <li>○ Lack of acceptance of risks associated with implementing adaptation action</li> <li>○ Change not yet seen as a problem; temptation to wait for the impact to be felt before reacting</li> <li>○ Reluctance to accept outside aid and assistance</li> </ul>
Normative behaviour	<ul style="list-style-type: none"> <li>○ Sticking to tradition and cultural response actions in relation to climatic stimuli, which may be inappropriate in the context of future environmental change or potentially maladaptive in the longer term</li> <li>○ Unwillingness to deviate from traditional practices and adopt more appropriate and sustainable strategies</li> </ul>
Institutional structure and governance	<ul style="list-style-type: none"> <li>○ Institutional inequities and social discrimination restrict access and entitlement to key resources and assets needed to adapt</li> <li>○ Political and social marginalisation and discrimination</li> <li>○ Lack of institutional flexibility</li> </ul>

Source: Jones, L., 2010. *Overcoming social barriers to adaptation*. London: Overseas Development Institute

As one would expect, each of these three features of social barriers overlaps strongly with the others. For example, perceptions and cognitive thought process are inevitably influenced strongly by institutional structures, in much the same way that institutional structures are often guided by cultural and traditional behavioural norms. However, each one is distinct in its own right and can play a significant role in either allowing or preventing adaptation action, particularly at local and community levels.

Figure 3. 1 Conceptual diagram showing various barriers and limits to adaptation



Source: Jones, L., 2010. *Overcoming social barriers to adaptation*. London: Overseas Development Institute. pp 4.

### 3.3 What are the implications of social barriers for Southern Africa?

Southern Africa's social and cultural context is very diverse. A wide range of different cultures, traditions, customs and rituals are present in the 14 SADC member states. The region is also home to innumerable tribes and ethnic and social groups, some representing small groups of a thousand or so, others consisting of millions of people. This mosaic of social and cultural diversity plays a major role in influencing both collective and individual behaviour. Understanding the processes that govern this behaviour is difficult, particularly as each social institution – be this ethnic rituals, traditional community practices or particular dietary habits – overlaps with other institutions and social processes, as well as with an individual's own agency and capacity to act, to form a complicated and multifaceted arena within which decisions are made.

These social processes can be supportive in terms of influencing actions taken to respond to climate variability and change – by providing channels for collective action, for example. However, in some instances they can act as real and challenging obstacles to sustainable and effective adaptation. This becomes even more testing given the strength and influence of many of these social institutions within the SADC region. It is for these reasons that southern Africa,

more than any other region, is facing challenges in overcoming social barriers to adaptation. The following sections explore some of the key social barriers affecting the region, analysing them on the basis of the three types of barriers described above – institutional, cognitive and normative.

### 3.3.1 Institutional barriers to adaptation

One of the largest obstacles to promoting equitable and sustainable adaptation in the context of Southern Africa can be seen in the form of restrictive social structures and institutional environments. Institutions, both formal and informal, are prominent across Southern Africa, and can play a large role in influencing the access and entitlement individuals have to the resources and assets needed to respond to shock and stress. They also have a significant effect on the governance and decision-making processes that determine allocation of these resources.

The impacts of climate change are widespread, but its consequences are disproportionately large for the poorest and most vulnerable communities.<sup>7</sup> Generally, these communities also face a host of wider pressures, some of which may be influenced by the impacts of climate change, including the threat of displacement in conflict, increasing population pressure on land, unequal resource distribution and globalisation. Actions communities take to adapt to climate variability and change will not benefit everyone equally; indeed, some may suffer negative impacts from adaptation actions. With this in mind, the capacity to adapt to climate change will depend largely on underlying structures of vulnerability, such as poverty, inequality and entitlement.<sup>8</sup> However, it is also likely that the effects of a changing climate will exacerbate existing inequalities and social structures.<sup>9</sup> Consequently, it is easy to see how restrictive institutions can help create and sustain the parameters of social exclusion and serve as a barrier to enhancing adaptive capacity at the community level.

Marginal and excluded groups across Africa provide a useful illustration of how exclusionary institutions and structures can act as a barrier to accessing the resources and entitlements required in times of need. In Kenya, four minority and indigenous communities – the Turkana, Nubian, Endoros and Muslims – remain socially excluded through poor access to resources and opportunities, insecure tenure and alienation from the state administration. Indeed, their weak voice in institutional and governance issues ‘restricts their ability to address most of these issues and increases their vulnerability in the face of environmental, economic and political problems’.<sup>10</sup> Many parallels could be drawn with the various minorities across the SADC region: from the Pygmies of the Great Lakes region, to the Himba of Namibia, the San of Southern Africa and the Hadzabe, Maasai and Barabaig of Tanzania.<sup>11</sup>

Institutional structures, such as those associated with tribal, ethnic and religious entities, overlap strongly and can each play a role in determining individual access to assets, capabilities and voice based on socially defined identities. For example, the institutional environment of a poor woman from a marginalised ethnic group in rural Southern Africa may consist of the various local informal ‘rules of the game’ that apply to women, such as household and family duties; unequal access to education in comparison with males; and inability to participate in village meetings and politics. In addition, it may also include institutional restrictions that affect marginalised groups, such as restrictions in employment opportunities and limited access to key resources; those related to religious belief systems, including compliance with rituals, values and beliefs, and

abiding by religious structures and behaviours; and dietary restrictions. Each of these institutional layers combines to influence, to a large extent, the individual's behaviour, access and entitlement to essential resources in times of need. In this regard, it is easy to see how exclusionary behaviours and structures, as well as social stigmas, can limit the adaptive capacities of various marginal groups across Southern Africa, such as widows, orphans, those infected with HIV and the disabled, to name but a few.

To take the gender issue further, many Southern African communities have different roles and responsibilities for men and women, shaped by traditional institutions, rules and behaviours. These features act as gender-specific barriers that limit the ability of women to cope with and adapt to a changing climate. Women, particularly those from poor, rural locations, are typically expected to carry out various prescribed roles and responsibilities. These may include caring for their family's subsistence; collection of water for drinking, cooking, hygiene and raising small livestock; and agricultural labour (see Box 3.1).

Moreover, many Southern African societies place an emphasis on women's supportive and reproductive roles, centred on the home and the local community rather than on the public sphere.<sup>12</sup> In the context of drought-affected smallholder communities in Tanzania and Kenya, women's livelihood options are much more limited than men's.<sup>13</sup> They are constrained by a lack of access to financial capital and by gendered norms that exclude them from certain economic activities. These factors each serve to limit women's capacities to both respond and adapt to perceived changes in the climate, influencing the effectiveness of household coping patterns. What is more, people's adaptation strategies can alter household gender relations, mostly to women's disadvantage.<sup>14</sup>

### **Box 3.1 Relationship between gender and agriculture**

*'Women's involvement in an agricultural capacity is most common in regions likely to be most adversely affected by the impacts of climate change, particularly sub-Saharan Africa and Asia. In these contexts, responsibility for adaptation is likely to fall on their shoulders – including finding alternative ways to feed their family. However, statutory and/or customary laws often restrict women's property and land rights and make it difficult for them to access credit and agricultural extension services, while also reducing their incentive to engage in environmentally sustainable farming practices and make long-term investments in land rehabilitation and soil quality.'*

*Source: Brody, A., Demetriadis, J. and Esplen, E., 2008. Gender and climate change: Mapping the linkages. Brighton: Institute of Development Studies. pp 4.*

These institutional constraints can have a significant influence on how women are permitted to react in times of external shock and stress. Incidents of heavier rainfall, greater frequency of droughts and more seasonality – widely predicted to occur across much of Southern Africa – is likely to increase women's workload, as they devote more time to collecting water and cleaning and maintaining their households. Much of this is time that could be spent in school, earning an income or participating in public life. Walking long distances to fetch water and fuel can expose women and girls to harassment and sexual assault, especially in areas of conflict; there are many accounts of women and girls being attacked when searching for water and kindling in refugee camps around Darfur.<sup>15</sup>

Research also suggests that gendered inequalities can be exacerbated in the aftermath of climate-related stress events and disasters. During times of need, and as household workloads increase, cultural institutions often dictate that girls drop out of school to assist with chores and subsistence duties. For example, during the floods of 2000 in southern Mozambique, institutions of patrilineality<sup>16</sup> limited women's control over land and other key assets, particularly in female-headed households, which make up a third of all households.<sup>17</sup> Moreover, relief efforts are managed and controlled almost exclusively by men. Women and their needs, competencies and experiences are often excluded from these efforts.<sup>18</sup> Aside from obvious physical and biological factors, these higher levels of vulnerability are socially constructed and come about largely from social institutions and cultural structures that differentiate the roles, entitlement and empowerment of different social groups.<sup>19</sup>

### 3.3.2 Cognitive barriers to adaptation

Cognitive barriers to adaptation relate to how thought processes and perceptions affect adaptation actions. One potential obstacle derives from public understanding of climate change. Citizens of Southern Africa – and Africa as a whole – are among the least informed on issues relating to climate change, its causes and consequences and the actions needed to adapt to it. Research conducted across 11 African countries and drawing on the insights of over 1 000 respondents highlights that in much of the continent many African citizens attribute changes in weather<sup>20</sup> patterns (in part or in full) to God, gods or fate.<sup>21</sup> As a result, there is a strong tendency for Africans to hold themselves individually or collectively responsible and accountable for degradation of the environment and any perceived changes in the weather. The research also points to a substantial role of religious and faith-based readers in informing and catalysing responses to climate change.<sup>22</sup>

This lack of information has serious implications not only for *whom* African citizens hold responsible for current and future changes, but also, inevitably, for *how* people react and adapt to these changes. In general, people who face impacts of a changing climate are far more likely to be able to adapt to shock and stress if they are suitably informed about the issues, are guided in their responses and are motivated to act. Indeed, research from the Africa Climate Change Resilience Alliance (ACCRA)<sup>23</sup> suggests that knowledge and information are core characteristics in promoting adaptive capacity at the local level.<sup>24</sup>

Part of the barrier here lies in the fact that individual responses to a changing climate may indeed be different depending on what people perceive to be its causes. By apportioning blame solely to God, Allah or other religious figures, people's responsive actions may be different from how they otherwise would be if climate change were attributed to different causes.<sup>25</sup> For example, perceptions that variable weather patterns are a result of 'God's will' in punishing people for their sins (see Box 3.2) may lead to responses that try to correct perceived wrongdoings.

Moreover, people and groups within communities have different perceptions of risk relating to climate hazards. Women, for example, tend to perceive greater risk and vulnerability than men when it comes to climate shock and stress events. And similar trends are identifiable among different ethnic and socio-economic groupings.<sup>26</sup> These perceptions and thought processes may also act as an obstacle to accepting the notion that continued changes in the climate – both

incremental and sudden – are likely to occur regardless of any internal and personal efforts to appease for ‘sins’, necessitating prompt adaptation actions to prevent increased vulnerability in the long term and reduce the likelihood of maladaptation. Research suggests that South Africans tend to perceive destruction of the environment as an inevitable consequence of their country’s development, and are, therefore, more likely to knowingly accept and engage in unsustainable practices.<sup>27</sup>

### Box 3.2 Selected interview quotes

‘The absence of rain [...] is the work of God and we have no control over it.’  
(Female, Tafelkop, South Africa)

‘The secret is with Allah. Allah brings the rain. The one who causes the drought, who sends us the drought is Allah.’  
(Female pastoralist, Afar, north-east Ethiopia)

‘The changes [in rainfall] is nature, human beings can’t cause it. We are in the rainy season so it can rain at anytime. If we are in November/December and it rains then we can say that our sins caused it. We have not sinned enough for God to destroy the world with rain because he has promised not to destroy the earth with rain again but he can use fire.’

(Female farmer, Rivers State, south-east Nigeria)

Sources: Deane, J. et al., 2009. *Least responsible, most affected, least informed: Public understanding of climate change in Africa*. London: BBC World Service Trust; Neville, L. et al., 2010. *South Africa Talks Climate: the public understanding of climate change, South Africa*: BBC World Service Trust. Available at: <http://africatalksclimate.com/sites/default/files/08-South%20Africa%20Talks%20Climate.pdf>.

Another cognitive barrier to adaptation can be seen in the form of self-determination and belief, particularly for marginalised groups. Groups that typically remain excluded from socio-economic and political activities, such as women, marginalised people or tribes and poorer members of the community, may choose to make conscious decisions not to voice their concerns in relation to their direct needs. In South Asia, certain excluded groups are often excluded entirely from decision making, owing largely to restrictive institutional environments and discriminatory perceptions.<sup>28</sup> This can have the cognitive effect of preventing them from seeking the change needed to enhance their adaptive capacities, and of promoting an acceptance that change may not be possible.<sup>29</sup> In some cases, this highlights how economic, political and ideological/cultural institutions can reinforce one another to sustain exclusivity of power within a small ruling elite.<sup>30</sup> Similar comparisons can be drawn in the context of Southern Africa, where institutional restrictions in entitlement and empowerment for various social groups are widespread, particularly at the community level.<sup>31</sup>

### 3.3.3 Normative barriers to adaptation

The ways people respond to external stress and hazards, such as drought and heavy rainfall, are shaped to some extent by societal norms and traditional coping strategies. Normative and cultural behaviour, therefore, play a large role in influencing how people respond in the face of anticipated climate variability and change. In many cases, this is a useful asset, in that responses to climate events build on a wealth of traditional and local knowledge, which, in turn, builds on lessons learnt from past experience. However, given that many of the changes projected to occur in a region’s climate may be of a different magnitude or may be unprecedented, persisting with

traditional means of coping with climate-related events may no longer be relevant or suitable (see Box 3.3).

### **Box 3.3 Norms influencing adaptation actions**

*'In 2000, Kenya experienced its worst drought in 40 years. Effects were severe for pastoralists because ancient coping mechanisms had broken down, either because land had been sold or because of barriers erected by the relatively affluent farmers, ranchers, industry, and city residents. Some traditional drought responses, such as raiding of neighbouring cattle and killing wildlife, have become illegal and are no longer an option. As societal norms affect traditional behavior, strategies may no longer be valid and there is the need to support the vulnerable population in identifying new strategies that enable them to deal with adverse climate and adjust to new socioeconomic conditions.'*

Source: UNEP, 2002. *Global Environmental Outlook 3*, UK: Earthscan Publications. as cited in:

*Abeygunawardena, P., Vyas, Y. & Knill, P., 2008. Poverty and Climate Change: Reducing the vulnerability of the poor through adaptation, World Bank. Available at: <http://data.iucn.org/dbtw-wpd/edocs/2010-022.pdf>. pp 16.*

Research from Bangladesh shows how cultural norms in a number of south Asian nations increase female vulnerability to flooding, resulting in a disproportionate amount of female deaths. Cultural norms prevent women from learning how to swim, as opposed to not being able to swim. In addition, women feel obliged to wear clothing that inhibits swimming and are constrained in their access to emergency warnings and cyclone shelters as a result of cultural norms, substantially increasing their vulnerability in the face of water-related hazards. These social barriers occur not as a result of their femininity, but rather through the institutional and cultural environment that governs acceptable behaviour and entitlement towards women.

Source: Chowdhury et al., 1993. as cited in Jones, L., 2010. *Overcoming social barriers to adaptation*. London: Overseas Development Institute. pp 4

Rural farmers in the region, from Tanzania to Swaziland, will each have their own ways of dealing with drought or heavy rainfall episodes, based largely on past experiences and traditional coping mechanisms. However, the projected likelihood of shifting seasonal patterns, sharp decreases in winter rainfall – particularly for the extreme south-west of the region – and increases in rainfall intensity<sup>32</sup> make it easy to conceive of a position whereby traditional short-term coping strategies are no longer appropriate. In this scenario, concrete longer-term adaptation measures, and in some cases complete transformations of livelihoods and practices, will be necessary. For example, research in Mozambique shows the livelihoods of the rural poor are increasingly reliant on traditional coping mechanism or reciprocity and exchange.<sup>33</sup> Difficulties and reluctance, as well as a lack of knowledge on how to deviate from traditional coping strategies, can lead to maladaptation, whereby individuals are ultimately made more vulnerable to the impacts of climate variability and change in the longer term.

Transcending traditional norms and behaviours is not something that happens easily or quickly. These characteristics can act as a considerable barrier to adaptation, even when adaptation actions are clearly identifiable and logical. An example from India is helpful in highlighting this.

In Assam, certain groups are unwilling to use flood-tolerant methods of house design – houses supported on stilts made from wood and bamboo – even though this has proven to help avoid the impacts of floods, simply because these houses are typically associated with poorer fishing communities and they do not want to be associated with the lower castes.<sup>34</sup> However, it is important to remember that social norms and behaviours can be overcome, however reluctant people may be. Gradual shifts in attitude may arise out of the fact that fewer response options exist, out of efforts to promote cultural change or out of generational differences. Returning to the example of India, it has been observed that ‘to deal with climate-related changes and stress, people in Assam have had to take on new occupations and livelihood options previously considered socially unacceptable, such as trading, selling fish, and liquor production’.<sup>35</sup> This shows that, although norms act as veritable *barriers* to adaptation, they rarely act as *limits* to adaptation, and are indeed surmountable.

### 3.4 How can adaptation policy making help overcome social barriers?

The insights above point to the strong influence of social and cultural factors on adaptation actions at the local level. As we have seen, however, few of these characteristics act as definite limits to adaptation, in the sense of being insurmountable. Indeed, many of them have the potential to be overcome through effective and well-thought-through actions by social agents, civil society and policy makers. Nevertheless, simple recognition of social barriers will do little to bring them down: it is important to take proactive steps to address them effectively. In the following sections we identify a number of concrete steps, relevant to the southern African context that can help overcome these barriers to adaptation.

#### 3.4.1 Education, communication and engagement

An obvious starting point in addressing social barriers is the promotion of education and awareness. This can take many forms and relates not only to communicating the causes and impacts of climate variability and change, but also to informing and educating people on the need to ensure sustainable adaptation and, with it, specific guidance on the most appropriate forms of adaptation action. Such initiatives will look to address many of the cognitive and normative barriers, particularly in an attempt to motivate effective and appropriate adaptation actions.

With this in mind, information on the type of adaptation action communicated is essential, as ill-informed or ill-considered recommendations can lead to maladaptive practices and increased vulnerability in the longer term. In this regard, adaptation will not be the same for everybody: small-scale subsistence farmers will have to adapt in different ways to larger-scale industrial farmers, in much the same way that rural communities will have to plan their adaptation action and policies differently from those in urban and peri-urban localities. In addition, it is important to recognise that communication may have a number of different means, and fulfil several different functions (see Box 3.4). Therefore, it is vital to give thought to both *how* relevant information is communicated and *who* is targeted and likely to receive it.

### Box 3.4 Types of communication in support of adaptation

- \* Educational communication is about sharing proven know-how, including support [for] training and technology transfer. The trend is to move from simply delivering the message to engaging the users in applying the information.
- \* Policy communication informs on policies and laws. This typically involves mass media and campaign formats, but further audience engagement is necessary when significant changes in policy take place.
- \* Participatory communication can help stakeholders come together, innovate and negotiate. Interactive group media are most often used to support such exchanges.
- \* Organisational communication improves coordination among and within groups and agencies.
- \* Advocacy communication helps people lobby for changes in policies and programmes. Very often, this function is implemented through a combination of campaigns and face-to-face interaction.
- \* Conflict management communication uses methods and media to encourage negotiation and to mediate conflicts. Video has been used successfully to allow each party to explain their interests, with the other side then able to view the recording. This is a form of structured listening.
- \* Risk communication informs people about hazards and supports people's participation in decision making on risk management, as well as encouraging behaviour change that will enhance mitigation.

Source: Acunzo, M. & Protz, M., 2010. *Collaborative Change: A communication framework for climate change adaptation and food security*, Rome, Italy: Communication for Sustainable Development Initiative (CSDI). Available at: <http://www.fao.org/docrep/012/i1533e/i1533e00.pdf>. pp 28.

Particularly important in the Southern African perspective is the need to ensure effective engagement in communicating climate change issues at the local level. This is crucial to guaranteeing acceptance and take-up. Notably, there is a lack of understanding about climate change terminology, particularly within certain Southern African languages, which can prevent public engagement. Appropriate words are not accessible for many Southern Africans and are often used interchangeably with other terms, and this can inhibit discussion of the issue in greater depth and clarity. For example, opinion leaders in South Africa point to the lack of appropriate vocabulary as a factor that prevents engagement and increases the perception that climate change is not immediately relevant to people's realities.<sup>36</sup>

Examples of this can be seen in the different interpretations of 'weather' and 'climate' (see Box 3.5), and confusion surrounding understandings of the processes of 'global warming' (often inaccurately conflated with the ozone layer, tectonic movements and earthquakes or other largely unrelated issues). Indeed, research suggests that an important repercussion of miscommunication is that 'a problem that will affect Africa more than any other continent is being framed in language and terms that are largely divorced from African reality'.<sup>37</sup> It is not only words that are important, but also recognising the cultural heritage and rich diversity of stories and myths that exist across Southern Africa. Although the scientific basis behind many of these stories may not be clear, working with and incorporating cultural beliefs into communication strategies can be

used as a means of engaging communities more effectively in important issues and to spur on behavioural change.

### **Box 3.5 The importance of communicating climate change effectively**

*'We don't have a term to describe climate change in our language. We have many words for particular weather conditions – such as wind – but it takes us at least four times as long to describe an issue of climate as it would in English [...] it means it can be quite boring for the listener.'*

(Claudie Tsheya Likela, general manager, TV Programmes, Namibian Broadcasting Corporation)

*'Climate change is an esoteric and initially confusing concept to many. Communication about it must use a community's own language and terms they can understand.'*

(Saleemul Huq, senior researcher, International Institute for Environment and Development)

*Source: Deane, J. et al., 2009. Least responsible, most affected, least informed: Public understanding of climate change in Africa. London: BBC World Service Trust*

Consequently, well-thought-through engagements for communicating climate change issues may be one of the most important components of adaptation policy. Crucial in attempts to connect and relate to the contexts of people at the local level are considerable efforts to contextualise climate-related information. Given that local authorities, ethnic and tribal chiefs and religious leaders have a strong influence on institutional, normative and cognitive behaviour within communities across southern Africa, the scope for including them in decision making and communication strategies is enormous. In this regard, the communication of climate-related issues can and should extend beyond written mediums, with practitioners exploring the use of theatre and art, and more modern means, such as audio and visual methods.<sup>38</sup> For example, experiences of using local theatre to promote social change on HIV/AIDS and health issues, environmental awareness and gender empowerment are well documented in southern Africa,<sup>39</sup> and demonstrate the effectiveness of this medium and its take-up.

The impetus for awareness and change must come from within the region and not from outside. Effective delivery and uptake is likely to be far more successful if communication and engagement are driven directly by the agendas and needs of southern African communities themselves. In this regard, African policy makers and agents of social change can look to South Asia, Nepal in particular, where rapid outreach and engagement on climate change-related issues have been relatively successful in raising public awareness over the past few years. In part, this has been achieved through active translation into local languages, as well as dissemination and awareness in public schools, libraries and government agencies, with a focus on public participation in and ownership of environmental protection activities. A multifaceted and bottom-up approach promoting the role of local communities, non-governmental organisations and both private and public agencies will contribute greatly to raising awareness of climate-related issues and, most importantly, generate the motivation needed to stimulate action and cognitive, institutional and behavioural change.

### **3.4.2 Addressing the underlying drivers of vulnerability**

As noted above, unequal and restrictive institutional structures can severely limit entitlement to the key resources needed to respond and adapt to climate-related threats. This is particularly the case for marginalised members of the community. These social and cultural factors are related largely to the underlying drivers of vulnerability and can determine, to a great extent, an individual's or group's adaptive capacity. Institutions and structures associated with land rights within customary land-tenure systems, ethnic and tribal kinship, and gender-related roles, rights and inequalities are prime examples of social characteristics that will inevitably have an influence on adaptation actions at the local level.

It is here that the role of wider development interventions can be significant. Many development interventions, such as those aimed at addressing disaster risk reduction, social protection and sustainable livelihoods, can be crucial in addressing restrictive institutions and structures. Development efforts that seek to reduce levels of absolute and relative poverty, to empower marginalised members of the community and to support greater access to resources and entitlement by the most vulnerable can contribute significantly to efforts to address many of the cognitive, normative and institutional barriers to adaptation – even if they do not specifically have a climate change programmatic focus. Moreover, these development approaches are themselves affected by many of the same social barriers. Rather than attempting to follow each approach in isolation, there is a need to recognise the complementarities in how different approaches tackle these barriers so as to move towards the common goal of helping to overcome the underlying drivers of vulnerability.

In this, it is important to consider the strong overlap between adaptation and 'traditional development' practice. Indeed, a wide spectrum of interventions can be considered as 'adaptation', from those concerned primarily with addressing the impacts of climate change to those associated with the underlying causes of vulnerability,<sup>40</sup> as many of the latter contribute to adaptive capacity and complement adaptation, falling well within the wider spectrum of adaptation projects.<sup>41</sup> With this mind, policy makers also need to ensure that efforts, planning and finance to support adaptation are not skewed towards the more highly visible 'impacts' end of the spectrum, but also support the 'vulnerability' end – with attention to the underlying drivers, and not merely those associated with climate change. Failure to make investments in these 'soft' measures will leave gaps in the landscape of adaptation efforts, and may risk seeing the issue of social barriers affecting the sustainability and effectiveness of adaptation planning, especially for the marginalised and most vulnerable members of communities in Southern Africa.

### 3.4.3 Mainstreaming and informing adaptation planning at national and local levels

Adaptation planning within the SADC region needs to give recognition to the role that social barriers can play in limiting the success of planned interventions. Therefore, it is vital to mainstream thinking around social barriers within wider adaptation policy frameworks, such as the work arising out of the seven national adaptation programmes of action (NAPAs) submitted to date within the SADC region and the single pilot project for climate resilience (PPCR).<sup>42</sup> Similarly, national and regional road maps and response strategies need to give recognition to the role of social and cultural characteristics in influencing adaptation action, and generate policy to

respond accordingly. For example, although partial mention of certain elements are given within South Africa's National Climate Change Response Strategy and its Framework for Sustainable Development, neither gives sufficient attention to the role of cognitive, normative and institutional barriers to adaptation, nor are there suitable policy responses.

Going one step further, initiatives to address these barriers should be incorporated into practical, structural and, most importantly, output levels of policy interventions, rather than simply giving mention to social barriers within the various frameworks. In the case of Nepal, initiatives are underway to prepare a parallel *local* adaptation programme of action. This aims to address adaptive interventions at the sub-district and community levels, looking to assess, inform and adapt specific cultural and institutional environments through the development of local programmes of action. This seems a novel way to deal with adaptive interventions at local level, and has the potential to be applied in the Southern African context.

Indeed, actions need to be taken at scales below national and regional states, right down to the community level. Although much of the focus is on planned adaptation, adaptive behaviour at the local level will mostly occur autonomously, that is, responses that take place without the direct intervention of a public agency. Given that autonomous actions are directed largely by existing cognitive, normative and institutional structures, efforts need to be made to facilitate informed and sustainable local adaptation. One example is community-based adaptation (CBA), which has gradually gained prominence across much of Africa. Tailored towards local cultures and conditions, CBA supports and develops informed autonomous adaptation to climate variability and change, involving both local stakeholders and development and disaster risk-reduction practitioners. As such, CBA builds on existing appropriate cultural norms while addressing local development issues that help alleviate vulnerability, making use of efforts to contextualise initiatives within the broader cultural environment.<sup>43</sup> Although CBA initiatives need to be wary of the influence of restrictive local institutions and structures, they are a useful starting point in trying to work towards addressing key social barriers in an inclusive, participatory manner.

### 3.5 Conclusion and policy considerations: Moving the agenda forward

Although there are a number of policy options that can enhance the adaptive capacity of people who are vulnerable to the harmful impacts of climate variability and change, attempts to enforce social and cultural change carry with them many complex and sensitive ethical concerns. Indeed, although social and cultural transformation may have tangible benefits, demanding that other cultures change and deviate from long-standing cognitive, normative and institutional practices is a sensitive issue and presents a major challenge, particularly given Southern Africa's rich social and cultural environment. However, if interventions are carried out in a way that complements and respects the social and cultural environment of the local context, they can help address the substantive obstacles that social barriers present. Although cultural norms and institutions are largely responsible for the creation of these barriers and restrictions, particularly at the local level, it is important to note that effective and equitable adaptation will occur only if these restrictions are recognised, influenced and overcome.

Policy makers within the SADC member states face a number of challenges for adaptation planning, as social barriers pose real obstacles to the success and sustainability of adaptation policy across the region. However, a number of policy options exist in trying to overcome these cognitive, normative and institutional barriers. At the heart of this, efforts to promote greater education, communication and empowerment are central to policy success. Moreover, there is an imperative to address underlying drivers of vulnerability and to ensure that social characteristics are mainstreamed into adaptation planning at all scales in order to facilitate sustainable adaptation and prevent maladaptation. Addressing the ‘soft’ approaches along the adaptation continuum may not be as visible, nor are the results easily measurable. Nevertheless, strong leadership from policy makers at all levels is needed in this area to help the Southern African region respond to and address the social barriers to adaptation it currently faces.

## Notes and References

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<sup>13</sup> Eriksen, S.H., Brown, K. and Kelly, P.M., 2005. The dynamics of vulnerability: Locating coping strategies in Kenya and Tanzania. *The Geographical Journal*, 171(4), pp.287–305.

<sup>14</sup> Ibid.

<sup>15</sup> Brody et al., 2008.

<sup>16</sup> Patrilineality is a system in which one belongs to one's father's lineage. It generally also involves the inheritance of property, names or titles through the male line.

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<sup>18</sup> Brody et al., 2008.

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<sup>21</sup> Deane, J. et al., 2009. *Least responsible, most affected, least informed: Public understanding of climate change in Africa*. London: BBC World Service Trust.

<sup>22</sup> Ibid.

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<sup>39</sup> See [www.communit.com/en/africa/soul-beat-158.html](http://www.communit.com/en/africa/soul-beat-158.html). [Accessed 05/05/2011]

<sup>40</sup> See the adaptation continuum, McGay et al., 2007.

<sup>41</sup> Ibid.

<sup>42</sup> The Democratic Republic of Congo, Lesotho, Madagascar, Malawi, Mozambique, Tanzania and Zambia have each submitted their NAPA to the United Nations Framework Convention on Climate Change, with Angola awaiting final submission as of March 2011. Zambia is the only Southern African country involved with the PPCR.

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