Climate Change in Senegal

Climate change presents an additional stress for Senegalese already struggling with the challenges posed by climate variability, ongoing environmental degradation and widespread poverty. Senegal is prone to unstable and irregular rainfall, and has experienced recurrent droughts over the decades, largely unrelated to climate change. The interrelation of climate change with other factors is complex and still evolving. However, in Senegal, climate change is projected to result in rainfall variability, with implications for water security and agriculture.

Fish stocks in Senegal are also susceptible, with negative impacts on fisheries, which are an important source of dietary protein, employment and revenue. A recent World Fish Centre report says that Senegal’s economy is “highly vulnerable” to the effects of global warming on fish stocks, and has a limited capacity to adapt. Other projections include rising sea levels, erosion of the coastline along which most of the population lives, and salinisation of fresh water sources.

The government has developed a National Adaptation Programme of Action (NAPA), but lacks funding to implement it. Given these constraints, civil society will likely play a vital role in Senegal’s response. Increasing the availability and quality of information and engaging the public will be critical to this response.

About Africa Talks Climate

Africa is particularly vulnerable to the impacts of climate change. Its effects are already being felt by citizens across the continent, yet too often their voices are absent from national and international climate debate.

Africa Talks Climate is a groundbreaking African-led research and communication initiative, founded on the belief that those worst affected must be better informed in order to understand and effectively respond to their changing climate. It has been launched ahead of the crucial UN climate change summit in December 2009 that seeks to broker a new climate treaty.

The research explores the public understanding of climate change in Africa. Discussions were convened with over 1000 citizens from DR Congo, Ethiopia, Ghana, Kenya, Nigeria, Senegal, South Africa, Sudan, Tanzania and Uganda, and interviews carried out with nearly 200 policy-makers, religious leaders, business people, journalists and civil society representatives.

It draws upon the expertise of a global advisory network of representatives from research and academic institutions, non-governmental organisations (NGOs) and donor organisations.

KEY INSIGHTS

Knowledge gap

There is low awareness of climate change and global warming among most people in Senegal. Many people explain changes in weather with reference to their existing knowledge of ozone “holes”, or depletion.

Impacts on the environment

A lack of knowledge and understanding of climate change contrasts with people’s high awareness of environmental degradation. Most are aware of the transformation in the natural environment and the depletion of food and water sources over their lifetimes. These are largely attributed to human activity and understood to be impacted by changes in the weather.

A local problem

People in Senegal generally link changes to the environment and in their weather to local human activity. There is little recognition that these problems are likely to have causes that extend beyond their own continent.

An expert topic

There is recognition among many opinion leaders that the national government and some NGOs are working on a response. Yet most lack clarity on the nature of this response. Most opinion leaders from outside government and NGOs feel that climate change is an expert topic about which they know very little. All opinion leaders agree that there is a need to improve the provision of information and communication on climate change at every level of Senegalese society.
Senegal: wider debate urgently needed

THE MAIN FINDINGS

People in Senegal recognise that changes in their weather and environment are affecting their lives. People frequently portray Senegal as a country that used to have an abundance of space and natural resources. In contrast, they say its resources are now depleted, and the country has become a crowded and expensive place to live. Sometimes, these transformations are linked directly to human activity, while at other times people connect changes in their environment to changes in the weather. As a man from Ziguinchor relates, “on the road leading to Bignona the mangrove used to be dense, but now it has completely disappeared, probably due to the lack of rain.” Over-fishing and polluted seas, meanwhile, are directly linked to human activity. A fisherman from Rufisque says, “there used to be fish here, big fish, but today we have to go forty kilometres into the ocean to get a good catch.”

Many people are deeply concerned about the changes in the weather and tell of the loss of distinct seasons, erratic rainfall and increases in temperature. People from the northern areas of Senegal are particularly concerned. A young man from Mbacké is typical of people in the region in saying that “there is no longer a good rainy season.” Many feel defeated by drought, “Before, with the abundance of rain, life was wonderful,” says a farmer from Darcou Mouy. “With this lack of rain... we get nothing out of these harvests.” As crops fail, farmers give up their land, as explained by a man from Mbacké: “people used to cultivate crops, but this is no longer possible... they have left the fields.” Their comments reflect feelings of helplessness. People do not refer to ways to adapt their practices to cope with the challenging climate, and many feel that the only option left is to migrate to urban areas.

Despite recognising the impact of their changing weather, awareness of climate change is low. Most people tend to understand the term to refer to seasonal changes or immediate changes in the weather. “When the climate changes”, explains a woman from Darcou Mouy, “it is when it is hot or cold.” Similarly, recognition of global warming is generally quite low among the public. The few who recognise the term understand it as a localised, and sometimes seasonal, increase in temperature or as an increase in global temperature. Despite low awareness of climate change and global warming, a small number of people spontaneously mention the ‘greenhouse effect.’ This does not appear to be a conscious reference to the meaning of the term. The few who use the term ‘greenhouse effect,’ none give accurate definitions of the concept.

Local problem, local causes

A lack of knowledge and understanding of climate change contrasts with people’s high awareness of environmental degradation. A tendency to connect human activity to changes in the environment informs people’s reactions when presented with a definition of climate change. Almost all think it conceivable that human beings could cause changes to weather patterns over time. Changes in weather tend to be seen as consequences of human actions. Observed increases in population, as well as smoke and gases from cars, factories and wood-burning, are understood to be responsible for the immediate area and cause local increases in temperature. “Right now it is hotter here than in the towns”, explains a middle-aged man from Ziguinchor, “[because here] people burn the forest and cut down the trees.” In addition, many people incorrectly believe that all waste gases cause ozone depletion, and that this causes changes in the weather. A small number of people from peri-urban and rural locations, meanwhile, attribute these changes to the will of God rather than to human activity. There is a little recognition by anyone that the problems they face are likely to have causes that extend beyond their own environment.

The only way in which people link pollution to causes beyond their locale is with reference to cars, which feature prominently in people’s explanations of changes in their local weather. People ascribe responsibility for the heaviest pollution to old imported foreign cars, which may be due to their knowledge of recent legislation forbidding the import of cars older than five years. Some people tend to set their concerns about pollution from cars within a global context. Yet despite these global references, people still do not understand the mechanism of global warming and never mention carbon dioxide by name. Just one allusion to carbon dioxide is made by a young man in Mbacké, who refers to “carbon gas” as “smoke coming from cars... that destroys the atmosphere.”

Opinion leaders: it’s an expert topic

Understanding of climate change varies among opinion leaders in Senegal. Although this research relies on relatively few interviews with opinion leaders, these suggest that knowledge of climate change is concentrated within national government and NGOs. While many opinion leaders outside these fields employ climate change terminology, they often refer to climate change as an “elite” or “expert” topic: one NGO representative acknowledges that the “discussion is still restricted to a circle of insiders.” Some go so far as to admit that they do not understand it at all. As one media representative says, “‘climate change’... is a term that is almost like an empty shell. You do not know what it is in there... what it refers to.” As a result, discussion of the causes of and responses to climate change often evolves into a general conversation around environmental degradation and ways to protect the environment.

Despite this confusion, there is a general consensus that Senegal is being affected by its changing climate. While some suggest populations in certain areas are most vulnerable, others highlight the challenges faced by communities in the Sahel region in the interior (“particularly small farmers, who are already close to the poverty threshold.” For a few, the rural exodus triggered by drought in the 1960s and 1970s sets a precedent for extensive migration. Rural-to-urban migration continues, and some anticipate that it will be “accelerated” by climate change. While rural communities are losing their younger people as they leave to find work, rural immigrants in towns and cities live in peri-urban areas with “no running water... no electricity [and] no sanitation,” says one NGO representative, who goes on to point out that intense rainfall and rising floods are projected to be one of the impacts of climate change. Extreme weather events of this kind will be devastating for people who often live in temporary structures, with “no protection systems” to help them cope.
Although opinion leaders in Senegal realise that their country is affected by climate change, they say that information on the subject is in short supply. While the Senegalese media covers extreme weather events such as drought and floods and their effects on local populations, coverage of climate change is limited. The media have little knowledge of climate change and are unfamiliar with the nature of the government response. One media representative says “the Senegalese people do not know what the work of [the environment ministry] actually relates to… its actions are not visible, even for us as media.”

In referring to the government’s response to climate change, most opinion leaders mention environmental initiatives, including the Great Green Wall afforestation programme, coastal protection, restrictions on imported cars, reforestation programmes and local sustainability initiatives. In contrast, government and NGO representatives are more focused in their response, and refer to the creation of a National Committee on Climate Change, as well as research to evaluate adaptation and mitigation strategies. Most agree that there is political will to respond to climate change, but limited funds to do so. There is a call for increased communication between sectors and better information provision for the public.

RECOMMENDATIONS

• The information and communication needs of Senegalese citizens must be at the heart of any national response to climate change.

• A successful information provision strategy should recognise that the response of Senegalese people to climate change will be determined by the availability and quality of the information available to them.

• Of immediate concern are the needs of information-poor rural communities already struggling with the challenges posed by climate variability and poverty. For them, climate change represents a tipping point. If these communities are to survive, there is a need for targeted information and resources that will enable them to cope with the impacts of climate change.

• All evidence suggests that international climate change discourse is inaccessible to most Senegalese. There is a need for information and debate that harnesses Senegalese’ understanding and experience of their changing weather and environment, to create a relevant discourse that promotes citizen engagement in Senegal’s response to climate change.

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