

Dispatch No. 264 | 7 December 2018

Amidst drought, only half of Batswana are aware of climate change

Afrobarometer Dispatch No. 264 | Gugu Nonjinge

Summary

Botswana is a semi-arid Southern African country characterized by erratic rainfall, recurrent droughts, low soil moisture, and extreme weather events such as flash floods (African Climate and Development Initiative, 2015) – a foundation of vulnerability for communities in the country. Frequent drought conditions have had significant impacts on domestic food production and other aspects of the national economy in the past (Seekings, 2016). In 2015/2016, Botswana experienced drought that resulted in the drying up of the Gaborone Dam – the main water supply for Botswana's capital – and was declared the worst drought in three decades (News24, 2015), and President Mokgweetsi Masisi declared 2017/2018 an arable agriculture drought year (Botswana Daily News, 2018a; APA News, 2018).

Acknowledging the threats that rising temperatures, possible changes in rainfall patterns, and other effects of climate change could pose to sectors ranging from food security and water to health and tourism (Botswana Daily News, 2018b; SciDevNet, 2012), the National Committee on Climate Change leads efforts to build consensus around climate-change issues (United Nations Development Programme, 2018).

Botswana is also a signatory to the Kyoto Protocol seeking to limit greenhouse-gas emissions and the United Nations Framework Convention on Climate Change (Botswana Guardian, 2018b).

But the latest Afrobarometer survey findings show that only half of Batswana have heard of climate change. Most who have heard of it say climate change is making life worse and has to be stopped, but few citizens are confident there's much they can do.

Afrobarometer survey

Afrobarometer is a pan-African, non-partisan research network that conducts public attitude surveys on democracy, governance, economic conditions, and related issues in African countries. Six rounds of surveys were conducted in up to 37 countries between 1999 and 2015, and Round 7 surveys have been completed in 2018. Afrobarometer conducts face-to-face interviews in the language of the respondent's choice with nationally representative samples.

The Afrobarometer team in Botswana, led by Star Awards Pty Ltd, interviewed 1,200 adult Batswana in July 2017. A sample of this size yields country-level results with a margin of error of +/-3 percentage points at a 95% confidence level. Previous surveys were conducted in Botswana in 1999, 2003, 2006, 2008, 2012, and 2014.

Key findings

Batswana are about evenly split as to whether climate conditions for agricultural production in their regions have gotten better (35%) or worse (32%) over the past decade. Assessments of climate trends for agriculture vary widely by region.



- Similarly, citizens are divided as to whether droughts and flooding have become more or less severe over the past 10 years.
- Only half (51%) of Batswana say they have heard of climate change. Rural residents, women, and less-educated citizens are less likely to be aware of climate change than urbanites, men, and better-educated respondents.
- Among Batswana who have heard of climate change, only 38% attribute it primarily to human activity.
- Most Batswana who have heard of climate change say it is making life worse (60%) and needs to be stopped (58%). But fewer than half say ordinary people can do "a lot" (19%) or "a little bit" (23%) to help stop it.

Climate conditions compared to 10 years ago

Asked whether climate conditions for agricultural production in their region have gotten better, gotten worse, or stayed the same over the past 10 years, Batswana are almost evenly divided: 35% say they have gotten "better" or "much better," while 32% say they have gotten "worse" or "much worse." About one in six (16%) say they have stayed the same (Figure 1).

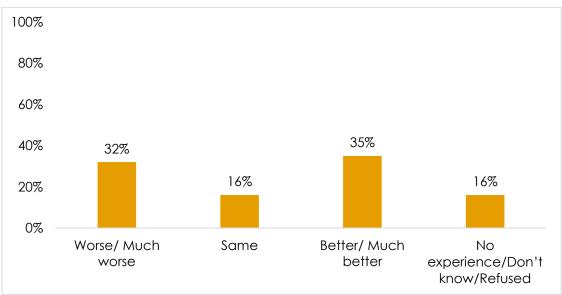


Figure 1: Climate conditions over the past decade | Botswana | 2017

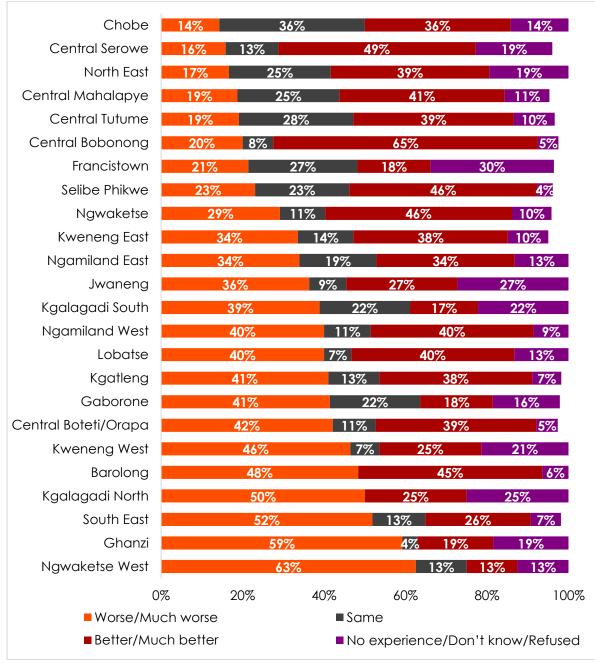
Respondents were asked: In your experience, would you say climate conditions for agricultural production in your area have gotten better, gotten worse, or stayed about the same over the last 10 years, or haven't you heard enough to say?

However, assessments of climate conditions vary widely by region.¹ Majorities in Ngwaketse West (63%) and Ghanzi (59%) say the climate has gotten worse, a view shared by fewer than one in five residents in Chobe (14%), Central Serowe (16%), North East (17%), Central Mahalapye (19%), and Central Tutume/Sowa Town (19%) (Figure 2). Close to two-thirds (65%) of respondents in Central Bobonong say climate conditions for agricultural production have improved.

¹ Reflecting their share of Botswana's total population, small sample sizes in many regions outside Gaborone, Kweneng East, and Central Serowe produce results with very large margins of error. Regional results should be considered purely suggestive.



Figure 2: Climate conditions over the past decade | by region | Botswana | 2017



Respondents were asked: In your experience, would you say climate conditions for agricultural production in your area have gotten better, gotten worse, or stayed about the same over the last 10 years, or haven't you heard enough to say?

When asked about the severity of flooding and droughts in their region over the past 10 years, Batswana again split almost evenly (Figure 3). Four in 10 (40%) say droughts have become "somewhat less severe" or "much less severe," while almost as many (36%) say they have become somewhat/much more severe.

With regard to flooding, 32% say its severity has diminished over the past 10 years, while 31% say flooding in the area where they live has increased.



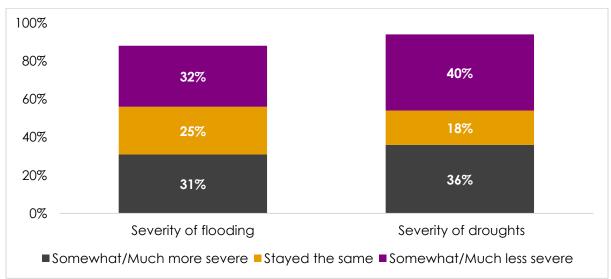


Figure 3: Severity of flooding and droughts | Botswana | 2017

Respondents were asked: In your experience, over the past 10 years, has there been any change in the severity of the following events in the area where you live? Have they become more severe, less severe, or stayed about the same?

- Severity of droughts?

- Severity of flooding?

Climate change awareness

Knowledge of climate change

Despite some personal observation of changes in the weather, only half (51%) of Batswana say they have heard of "climate change" (Figure 4).

Lack of awareness of climate change is higher in rural (61%) and semi-urban (46%) areas than in cities (26%). Women are more likely than men to be unaware of climate change (52% vs. 42%). Respondents with no formal education (75%) or only primary schooling (67%) are more likely to be unfamiliar with climate change than those with secondary (46%) or post-secondary (22%) qualifications (Figure 5).

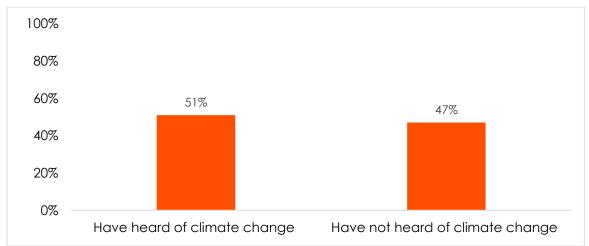


Figure 4: Awareness of climate change | Botswana | 2017

Respondents were asked: Have you heard about climate change, or haven't you had the chance to hear about this yet?



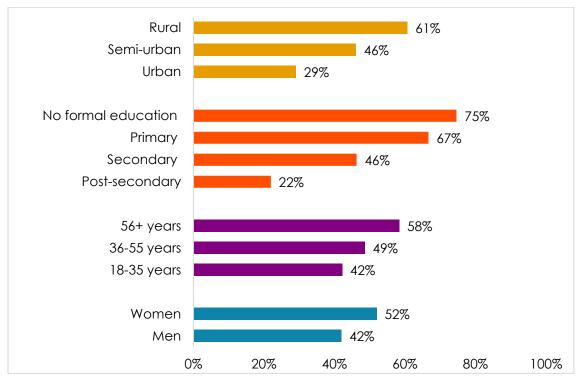


Figure 5: Have not heard of climate change | by socio-demographic group | Botswana | 2017

Respondents were asked: Have you heard about climate change, or haven't you had the chance to hear about this yet? (% who have not heard of climate change)

Afrobarometer asked respondents who had heard of climate change what the concept means to them. A majority (56%) say that it refers to negative changes in the weather, such as more droughts, floods, or extreme heat, while more than one-third say it refers to positive changes (16%) or other changes (21%) in weather patterns (Figure 6).

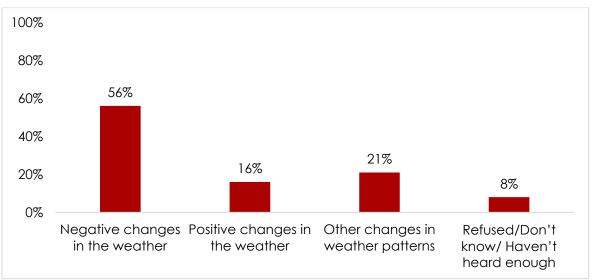


Figure 6: Meaning of 'climate change' | Botswana | 2017

Respondents who had heard of climate change were asked: What does the phrase "climate change" mean to you? (Respondents who had not heard of climate change are excluded.)



Causes of climate change

Among Batswana who have heard of climate change, close to four in 10 (38%) say it is primarily caused by human activity. One in four (25%) believe that climate change occurs as a result of natural processes, while the same proportion (26%) attribute it to a combination of human activity and natural processes (Figure 7).

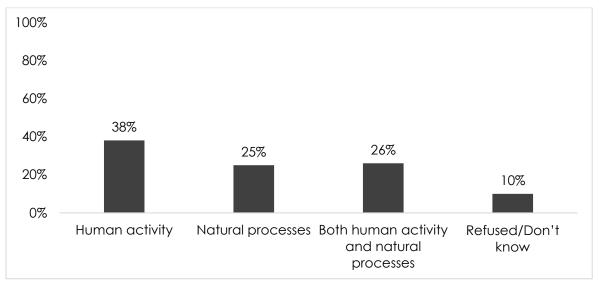


Figure 7: Main cause of climate change | Botswana | 2018

Respondents who had heard of climate change were asked: People have different ideas about what causes climate change. What about you, which of the following do you think is the main cause of climate change, or haven't you heard enough to say? (Respondents who had not heard of climate change are excluded.)

Effects and mitigation of climate change

Among Batswana who have heard of climate change, a majority (60%) say it is making life in Botswana "somewhat worse" or "much worse" (Figure 8). Only 20% think climate change is having a positive impact on the nation's quality of life.

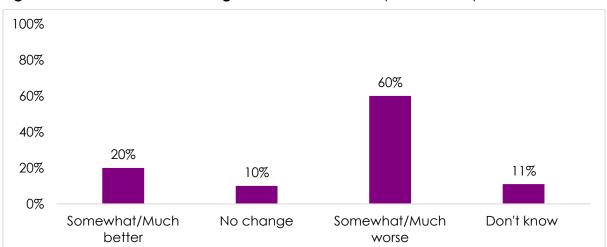


Figure 8: Effect of climate change on life in Botswana | Botswana | 2017

Respondents were asked: Do you think climate change is making life in Botswana better or worse, or haven't you heard enough to say? (Respondents who had not heard of climate change are excluded.)



The view that climate change is making life in Botswana worse is more widely shared by urban (64%) than rural (53%) residents, and is particularly strong among the best-educated (71%) (Figure 9). Perhaps surprisingly, younger citizens are less likely than their elders to see climate change as harming their quality of life.

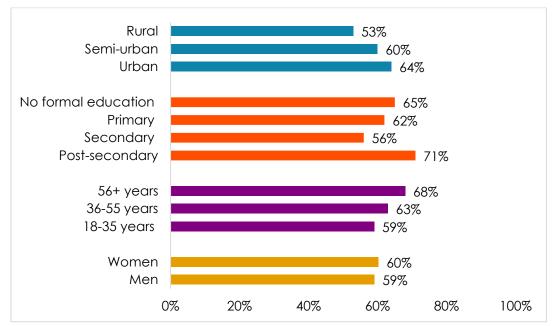


Figure 9: Climate change making life worse in Botswana | by socio-demographic group | Botswana | 2017

Respondents were asked: Do you think climate change is making life in Botswana better or worse, or haven't you heard enough to say? (% who say "somewhat worse" or "much worse") (Respondents who had not heard of climate change are excluded.)

Among citizens who are aware of climate change, a majority (58%) say that climate change has to be stopped. However, fewer than half say ordinary people can do "a lot" (19%) or "a little bit" (23%) to help stop it (Figure 10). Almost one-third (31%) say climate change doesn't need to be stopped.

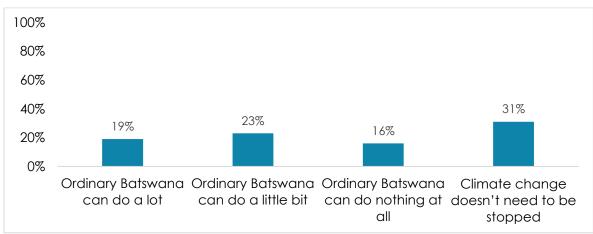


Figure 10: Stopping climate change | Botswana | 2017

Respondents were asked: Do you think that climate change needs to be stopped? [If yes:] How much do you think that ordinary Batswana can do to stop climate change? (Respondents who had not heard of climate change are excluded.)



Conclusion

Most Batswana who have heard of climate change say it is making life in their country worse. But almost half of the country's citizens have not yet heard of climate change. This is especially common in rural and semi-urban areas, among women, and among lesseducated and older citizens – obvious target audiences for informational campaigns by the government, civil society, and the media. Only citizens educated about the causes and effects of climate change can be expected to demand, support, and help implement policies to mitigate this threat.

Do your own analysis of Afrobarometer data – on any question, for any country and survey round. It's easy and free at www.afrobarometer.org/online-data-analysis.



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Afrobarometer is produced collaboratively by social scientists from more than 30 African countries. Coordination is provided by the Center for Democratic Development (CDD) in Ghana, the Institute for Justice and Reconciliation (IJR) in South Africa, the Institute for Development Studies (IDS) at the University of Nairobi in Kenya, and the Institute for Empirical Research in Political Economy (IREEP) in Benin. Michigan State University (MSU) and the University of Cape Town (UCT) provide technical support to the network.
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