Kiribati: Climate Leadership in a Drowning Paradise

By Karen Zhang 16 November 2020



South Tarawa, Kiribati, a narrow strip of land divides the lagoon (left) and the ocean (right). Photo courtesy of <u>Government of</u> <u>Kiribati employee</u>.

Take a wild guess: How many countries have names that start with the letter K? This can be a fun trivia question during the COVID-19 lockdown. If your answer matches the number of fingers on one hand, you earn a BINGO. According to the World Atlas (Aggie, 2018), these are the five countries with names starting with K: Kazakhstan, Kenva, Kuwait, Kyrgyzstan, and Kiribati (pronounced Ki-ribahss).

Among the five K-name countries, Kiribati is probably hardest to locate on the world map. Searching for its sovereign boundary is like searching at sea for the debris of a wrecked

(Figure 1). plane Located in Oceania. Kiribati's 313 square miles-four times the size of Palau Washington, D.C.are stretched in a string of 33 coral atolls, 21 of which are inhabited, that necklace over the equatorial Pacific for 2.300 miles from east to west-the distance from New York to Los Angeles. Kiribati is the only country in the world to fall into all four hemispheres (northern, southern, eastern, and western).



Figure 1 Kiribati as one of the Pacific island countries. Retrieved from <u>PacLII</u>.

The three main island groupings are the Gilbert Islands (Kiribati's British colonial name), Phoenix Islands, and Line Islands. Half the country's population of 111,000 lives in the capital and the country's hub, South Tarawa, on the Gilbert Islands (Figure 2). English and Gilbertese are the two most widely spoken languages. (Author's Pick: Living in Kiribati as an American)



Figure 2 More than half of the I-Kiribati population live in South Tarawa.It is noteworthy that the island of Betio in the westernmost of the Tarawa atoll used to be one of WWII's bloodiest battlefields. Retrieved from <u>Wikipedia</u>.

Geologically, Kiribati is a low-lying country with many atolls rising just 6.6 feet—as tall as Michael Jordan—above sea level. The highest point is Banaba, a controversial island, which reaches 285 feet above sea level. Banaba is now sparsely inhabited as a result of overexploitation of its rich phosphate by British colonists and locals. Climate change-induced rising sea levels have increased the existential threats to Kiribati, its population and culture. According to a 2016 study, almost every household (94%) in Kiribati reported being impacted by a natural hazard over the period 2005-2015, with sea-level rise affecting 80% of households (Oakes et al., 2016).

As filmmaker Matthieu Rytz described, "Kiribati is a heartbreaking case study for those interested in taking stock of our rapidly accelerating climate woes. (Rytz, 2018)" In the following pages, we will dive into this drowning Pacific paradise before it soon vanishes on the horizon in this century. Precisely, we will follow the footsteps of former President of Kiribati Anote Tong (2003-2016) and his successor President Taneti Maamau (since 2016) in the same way as we have acquired wisdom from our forebears to fortify a drowning country with climate resilience.

SUSTAINABILITY CHALLENGES

Due to its location in the Central Pacific Ocean, Kiribati has an equatorial maritime climate that is hot and humid with two different seasons. The dry seasons are between December

and February, and from June to mid-September. The rainy seasons last from February to the end of May, and from September to the end of November. Generally, hurricanes and



Figure 3 Kiribati in the aftermath of Cyclone Pam. Photo courtesy of <u>AFP/SPC</u>.

tropical cyclones are rarely formed near the equator. Nevertheless, climate change has contributed to the rise in extreme weather, of which Cyclone Pam in March 2015 caused havoc in the Pacific Small Island Developing States (PSIDS) the United Nations parlance (PSIDS, n.d.)—including Kiribati. Destructive storm waves and surges significant triggered flooding in South Tarawa. uprooting trees and people from their homes. It is estimated up to 4,000 people were affected (Figure

3). In the aftermath of Cyclone Pam, USAID has provided \$2.2 million for humanitarian assistance in Kiribati and other PSIDS (USAID, 2020).

Putting aside the imminent threat from climate change, Kiribati's living conditions—from water and sanitation to healthcare and housing—are insufficient by a long shot. Due to its remote geographic location and unaffordable telecommunication, Kiribati is a country easily forgotten. To this sustainability professional's dismay, Kiribati does not appear in or is often associated with an "N/A" footnote in multiple indicators of intergovernmental entities or sustainability societies. In other words, we cannot evaluate Kiribati on an equal footing with other small developing countries by landmass size such as Bahrain and the Dominican Republic.

After its independence from Great Britain in 1979, Kiribati joined the United Nations in 1999. It has been an active participant in international efforts to combat climate change. Nonetheless, Kiribati is recognized as a Least Developed Country (LDC) and is ranked 170th of 186 countries on per capita GDP (INDC Kiribati, n.d.). The UN Sustainable Development



Current Assessment

Figure 4 Retrieved from <u>SDGs Dashboard.</u>

Report (Figure 4) shows among the 17 Sustainable Development Goals, Kiribati performs the best in Goal 17 about "Partnerships for the goals" whereas Goal 4 about "Quality

education" is declining (SDG Index, 2020).

With a score of 37.7, Kiribati is in the 118th place out of 180 countries in the Environmental Performance Index 2020. Among the 25 countries in the Asia-Pacific region, Kiribati ranks no.11 (EPI, 2020). But this medium regional standing cannot justify the deteriorating

ecosystem in this island nation. A UN report dated back to 1992 sounded the alarm that the PSIDS such as Kiribati alike threatened are bv global warming and the rise of sea levels (Nations Encyclopedia, n.d.). A rise in sea level by even two feet (60 would cm) Kiribati uninhabitable.



leave Figure 5 (left) green sea turtle. Figure 6 (right) mukojima bonin honeyeater

Such forecast that was envisioned in 1996 could become a reality by 2100. It might be sooner judging from the unrelenting fossil fuel demand since 1996. Kiribati is also vulnerable to earthquakes and volcanic activity. The UN report described wildlife in PSIDS as "among the most critically threatened in the world." Endangered or extinct species include the green sea turtle (Figure 5) and mukojima bonin honeyeater (Figure 6).

Kiribati is not only a gem for studying human and nature relationships, it is also a sanctuary for us to rethink the significance of existence for want of necessities. The Human Development Index 2019 that focuses on life expectancy, education, and per capita income



Figure 7 Low tide in South Tarawa lagoon. Retrieved from <u>NPR</u>.

of human development placed Kiribati the 132nd out of 189 countries and territories. Kiribati scored 0.623, sharing the rank with Honduras (HDI, 2019). However, about 60 percent of the population has improved no access to That sanitation facilities. explains why the lagoon in South Tarawa is heavily polluted by solid waste disposal (Figure 7). Not to mention metals and chemicals

from mining activities and agricultural chemicals have long polluted Kiribati's coastal waters. Scientists have warned that I-Kiribati—a name that Kiribati's indigenous residents give themselves—may die of thirst before drowning (Weiss, 2015).

Historically, I-Kiribati have long lived with the spectre of environmental catastrophe. In the

1950s drought forced colonial authorities to relocate hundreds of I-Kiribati to the Solomon Islands. The exhaustion of phosphate reserves on Banaba Island led to external migration to Fiji. Severe overcrowding on South Tarawa is now depleting freshwater reserves. To make matter worse, climate change contributes to more high-tide coastal flooding, longer heatwaves and droughts in the tropical island, further deteriorating its fragile water resources and facilities.

Unlike their former president Anote Tong who has earned international recognition for speaking out on the threats of climate change, most I-Kiribati do not dwell on such matters. They go about their daily lives just like residents of other countries—Kiribati has a land deficiency but it has the world's 12th largest Exclusive Economic Zones (EEZ)(Migiro, 2018). Thus, I-Kiribati are heavily dependent on fishery and marine ecosystems for their livelihoods. Kiribati has the largest productive tuna fishery and its public sector accounts for more than half of GDP. Because of the circulation of the Australian dollar in Kiribati, the government has no independent monetary policy and control over its external exchange rate. The main source of revenue is the issuing of licences to distant fishing nations such as Japan, South Korea, Taiwan and the United States. Another source of revenue is the remittances sent from abroad by I-Kiribati who work overseas. Kiribati relies almost entirely on foreign aid for its development budget (ABC, 2005).

With respect to the GNI Per Capita, a comparison tool that measures the social, economic, and environmental wellbeing of the country and its people, Kiribati ranks no. 151 (i.e. no. 35 from the bottom) out of 191 countries that have measurable data (GNIPC, 2020)(See below sample).

Countries and territories	Purchasing power parity (international dollars)	Ranking
Macau SAR, China	123, 290	1
United States	65,880	10
China	16,740	81
India	6,960	131
Tuvalu	6,170	137
Kiribati	4,650	151
Burundi	780	191

World Bank Gross National Income Per Capita 2019 (full report click here)

According to the World Bank, unemployment is particularly high for I-Kiribati youth, with 73 percent of women and 62 percent of men aged 15-24 years old lacking any formal employment (World Bank, 2020). Kiribati's growth potential is constrained by both geographical factors and the lack of infrastructure and private sector development. Because its soil is shallow, alkaline and very low in organic matter content, and is coupled with water scarcity and the rise of sea level, Kiribati's agriculture resources are limited. Breadfruit, coconut and fish are I-Kiribati's traditional diet. Given Kiribati's limited

domestic production ability, it imports nearly all its essential foodstuffs and manufactured items. Food accounts for one third of all imports mostly from Australia, Japan and Singapore. But like many other indigenous people around the world, I-Kiribati have a serious obesity problem as a result of Western diets—the country's population is ranked the eighth most obese in the world (Keating, 2018). It is undeniable that the vice and virtue of global trade has influenced every facet of life in every population on the planet. After all, a country as tiny on the world map as Kiribati is not that isolated in the wave of globalization.

CLIMATE RESILIENCE UNDER TWO PRESIDENCIES

To I-Kiribati, Tuvalu is like a historical and geographical neighbor (See Figure 1). In 1916, Britain turned the Gilbert Island (now Kiribati) and the neighboring Ellice Islands (now Tuvalu) into the Gilbert and Ellice Islands Colony. The colony was mainly characterized by phosphate mining, leaving an irreparable mark in Kiribati's Banaba Island. Although both sovereign states are facing similar existential threats of climate change—two of Tuvalu's nine islands are on the verge of going under (Roy, 2019), Kiribati does not have an infrastructure plan like that in Tuvalu for building a seawall around the administrative center of the capital, Funafuti. Instead, under former president of Kiribati, Anote Tong, the government purchased a 20-sq-km plot of land for US\$8.77 million on Vanua Levu, one of the Fiji islands in 2014. President Tong's bold move brought Kiribati global attention for becoming the only atoll nation known to have purchased land abroad for relocation. In the immediate future, the land purchased by Kiribati will above all be used for agricultural and fish-farming projects to guarantee the nation's food security (Caramel, 2014). Fiji has opened its arms to welcome climate refugees from Tuvalu and Kiribati. *(Author's pick: Kiribati Land Purchase in Fiji)*

You might hear of the term "climate refugee." The term is derived from a ground-breaking lawsuit surrounding a man from Kiribati. In September 2015, Ioane Teitiota from Kiribati was deported from New Zealand after authorities denied his claim of asylum as a "climate refugee." Six month later in February 2016, Teitiota brought his case against the government of New Zealand at the UN Human Rights Committee (HRC). HRC's ruling arrived early this January, marking the first ruling on climate change-related asylum seeking. The Committee stated that countries may not deport individuals who face climate change-induced conditions that violate the right to life (OHCHR, 2020). The landmark decision surely sets a global precedent.

President Tong perhaps is yet the most vocal I-Kiribati for global climate action. During his presidency (2003-2016), he frequently lectured rich countries about the human impact of rising carbon emissions. In his view, climate change is not an issue that respects any sovereignty. The carbon emissions from rich countries like Australia, the United States and alike are endangering the very existence of Kiribati, where the average resident emits less than one ton of carbon dioxide each year, or 7 percent of the global average. "If it's a national issue, keep your emissions within your borders, which you cannot do," said President Tong in an interview with Time magazine (Worland, 2015). His remark echoes his predecessor, Former President Teburoro Tito's famous analogy about inequality of

country contributions to climate change: "The islands are ants and industrialized nations are elephants."

President Tong's climate adaptation plan was two-fold. First, his government purchased land abroad specifically for farming on a food-security dimension and for relocation of his people due to climate change. In order to allow I-Kiribati to apply for jobs abroad with dignity rather than being regarded as refugees or second-class citizens, his government championed "migration with dignity" programs for vocational training to ensure that I-Kiribati could apply for jobs on offer in neighboring countries such as New Zealand. Educated young I-Kiribati seemed to be more receptive to the policy than their parents or grandparents who would rather live and die where they were born.

So what would you do about those who rather stay behind? On the economic front, President Tong's government implemented the Vessel Day Scheme in 2012 after joining other small Pacific countries to ratchet up the fees they charge tuna fishing boats to enter their waters, aka EEZ. In 2011, Kiribati's fishing license revenue was just \$29.1 million (17 percent of GDP), but by 2015, revenue had risen to \$207.1 million (90 percent of GDP) (Webb, 2020). Alongside, President Tong's government banned commercial fishing in the Phoenix Island Protected Area (PIPA) effective on January 1, 2015. PIPA, which makes up 11.3 percent of the EEZ of Kiribati is the largest marine area on UNESCO's World Heritage List. In Tong's word, this is his country's "commitment to fight climate change" and a demonstration of making a sacrifice in order to make a major contribution to ensure biodiversity and the maintenance of fishing stocks well into the future. *(Author's pick: My Country Will Be Underwater Soon—Unless We Work Together)*



Figure 8 The floating island designed by Shimizu Corporation.

President Tong's ambition for climate adaptation did not only rest in the present. During his tenure, constructing a floating island was explored. He pointed to China's strategic island building in the South China Sea as evidence that this was possible (Keating, 2018). He called on the international communitv physically to reinforce the island to raise it further above sea level. The seed of international partnership to elevate the sinking island nation was

germinated in Japan's Shimizu Corporation (Figure 8). If you visit Shimizu's <u>demo video</u> of the floating island, you'll not be disappointed by the promising future taken place in a tower that connects the vast sea and sky. Such a grand futuristic concept is estimated to cost US\$450 billion partly because it relies on technology that has yet to be invented.

Nonetheless, Kiribati's incumbent president, Taneti Maamau (since 2016), does not

support the floating island project. He does not believe Kiribati will disappear. "We are telling the world that climate change impacts Kiribati, it's really happening," he said at a UN high-level meeting. "But we are not telling people to leave. (Walker, 2017)" Kiribati is fervently Christian, and churches hold enormous sway over public opinion. With respect to Kiribati's destiny of drowning, President Maamau certainly has stood up for the Noah's Ark to save the Kiribati people by confirming that "the ultimate decision is God's. (Walker, 2017)"

Following the launch of the SDGs in 2015, Kiribati issued the preliminary indicators to all government agencies and the public, which led to the formation of the Kiribati Development Plan 2016-19 and a national set of indicators (Kiribati, 2018). If there are measurable data, there will be a manageable solution. Under President Maamau, the Kiribati government has launched the "Kiribati Vision 20," or KV20, a twenty-year sustainable development plan covering the period out to 2036. KV20 aims to strengthen environmental and social benefits from the key economic sectors of tourism and fisheries. *(Author's pick: <u>Kiribati Vision 20 in the Face of Climate Change</u>)</u>*

President Maamau believes that if the quality of life increases in Kiribati, the island's capacity to adapt to economic effects of climate change will increase with it. As a result, many of his initiatives are about the island nation's development above all else. His plan requires more money coming to Kiribati from international aid as well as from China's direct investment. To win China's favor, Kiribati cut diplomatic tie with Taiwan in 2019 and signed on to China's Belt and Road Initiative. Although climate change is already intervening the coconut trade due to longer drought periods, the government aims to expand it to boost I-Kiribati's income. In addition, the government has doubled its copra subsidy as a means to spur migration back to Kiribati's outer islands where coconuts are plenty. In President Maamau's view, this measure could reduce overcrowding in South Tarawa and improve social vulnerabilities such as disease and informal housing in the capital.

As much as the government wants to boost fishing industry, it is worth keeping in mind for both I-Kiribati and people who care about Kiribati's largest economic resource—the tuna fishery—climate change has the potential to disrupt business-as-usual through anticipated impacts on tuna migration and spawning patterns across the Pacific. Above all, severe climate change displaces both wildlife and people (Figure 9). Kiribati is already facing the challenge of both internal and international migration due to climate change. *(Author's Pick: Vulnerability Profile of Kiribati)*

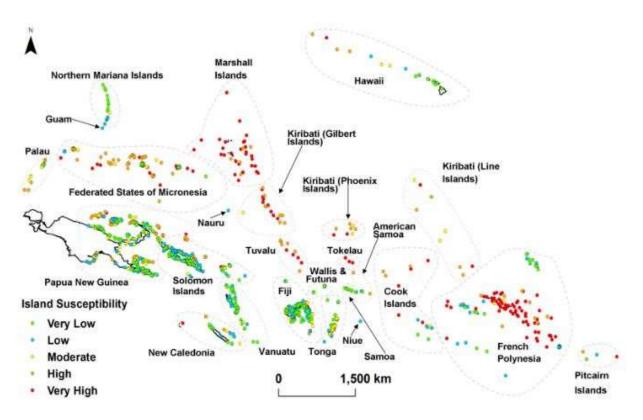


Figure 9 Indicative susceptibility of Pacific islands to climatic and oceanographic processes. Retrieved from <u>The Asia Dialogue</u>.

Key Takeaways

Former president Anote Tong once called his people "the polar bears of the Pacific. (Yeo, 2014)" Both are losing their homes very soon as glaciers are also shrinking fast. Low-lying island countries such as Kiribati, Tuvalu and alike—whose country names are lesser known to the world—are strongly identified with their proud tradition of endurance and survival. More often seen dressed in casual wear than suit and tie. President Tong exemplifies I-Kiribati's purity and geniality. Dubbed as a "climate warrior," he has stressed the existential threats of climate change to islands, populations and culture on multiple occasions. Indeed, in the context of sinking Kiribati, when people lose spiritual connection and community identification, they don't regard themselves indigenous. But the truth is the islands are not sinking, the sea level is rising. When the land itself disappears, if no state existing on a spot where once there was one, how should we comprehend the meaning of a sovereign state, which characterized by physical boundaries? How will I-Kiribati identify their nationality if their homeland is inhabitable and their diaspora is scattered elsewhere? After the rest of the country's population has relocated abroad, is it a tongue-in-cheek joke, or not, that Kiribati may only be a reinforced platform with a flag perched in the open ocean? Or, perhaps the number of countries starting with the letter K reduced from five to four deserves a toast for the loss.

All in all, Kiribati is only one of many countries that are, and will be, impacted by climate change in this century. As President Anote Tong said, "I have no choice but to engage with the debate. I have no choice because the future of my people is on the land. It's very important the other leaders understand the way we feel and the challenges we face. It's an issue that cannot solve itself. We've got to have good strong leadership here." Kiribati allows every global citizen to ponder the meaning of a country, of living, of death, and of humanity. (*Author's Pick: <u>Sinking Islands, Floating Nation</u>)*

WORK CITED

ABC. (2005). Kiribati. Individual Country Profiles. ABC Radio Australia. <u>https://www.abc.net.au/ra/pacific/places/country/kiribati.htm</u>

Aggie Ms. (2018, May 29). Countries That Start With The Letter K. World Atlas. <u>https://www.worldatlas.com/articles/countries-that-start-with-the-letter-k.html</u>

Caramel, Laurence. (2014, June 30). Besieged By the Rising Tides of Climate Change, Kiribati Buys Land in Fiji. The Guardian. <u>https://www.theguardian.com/environment/2014/jul/01/kiribati-climate-change-fiji-vanua-levu</u>

EPI. (2020). Environmental Performance Index 2020. Yale Center for Environmental Law & Policy. Yale University. <u>https://epi.yale.edu/downloads/epi2020report20200911.pdf</u>

GNIPC. (2020, July 1). Gross National Income Per Capita 2019 (GNIPC). The World Bank. <u>https://databank.worldbank.org/data/download/GNIPC.pdf</u>

HDI. (2019). Kiribati. Human Development Index (HDI). Reports. The United Nations Development Programme. <u>http://hdr.undp.org/en/countries/profiles/KIR</u>

INDC Kiribati. (n.d.). Republic of Kiribati: Intended Nationally Determined Contribution (INDC). <u>https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Kiribati%20First/INDC_KIRIBATI.pdf</u>

Keating, Joshua. (2018). Invisible Countries: Journeys to the Edge of Nationhood. Yale University Press. p.206, p.214.

Kiribati. (2018). Voluntary National Review 2018. The United Nations Sustainable Development Goals Knowledge Platform. <u>https://sustainabledevelopment.un.org/memberstates/kiribati</u>

Migiro, Geoffrey. (2018, June 29). Countries With The Largest Exclusive Economic Zones. World Atlas. <u>https://www.worldatlas.com/articles/countries-with-the-largest-exclusive-economic-zones.html</u>

Nations Encyclopedia. (n.d.). Kiribati-Environment. <u>https://www.nationsencyclopedia.com/Asia-and-Oceania/Kiribati-ENVIRONMENT.html</u>

Oakes R., Milan A., Campbell J. (2016). Kiribati: Climate Change and Migration—Relationships Between Household Vulnerability, Human Mobility and Climate Change. Vol. No. 20. Bonn: United Nations University Institute for Environment and Human Security (UNU-EHS). <u>http://collections.unu.edu/view/UNU:5903</u>

OHCHR. (2020, January 21). Historic UN Human Rights Case Opens Door to Climate Change Asylum Claims. Office of the United Nations High Commissioner for Human Rights (OHCHR). <u>https://www.ohchr.org/EN/NewsEvents/Pages/DisplayNews.aspx?NewsID=25482&LangID=E</u>

PSIDS. (n.d.). Pacific Small Island Developing States United Nations Member States. <u>https://www.un.org/esa/dsd/resources/res_pdfs/ga-64/cc-inputs/PSIDS_CCIS.pdf</u>

Roy, Eleanor A. (2019, May 16). "One Day We'll Disappear": Tuvalu's Sinking Islands. The Guardian. https://www.theguardian.com/global-development/2019/may/16/one-day-disappear-tuvalu-sinkingislands-rising-seas-climate-change

Rytz, Matthieu. (2018, January 24). Sinking Islands, Floating Nation. Op-Docs. The New York Times. <u>https://www.nytimes.com/2018/01/24/opinion/kiribati-climate-change.html</u>

SDG Index. (2020). Kiribati. The Sustainable Development Report (formerly the SDG Index & Dashboards). <u>https://dashboards.sdgindex.org/profiles/kir</u>

USAID. (2020, June 16). Tropical Cyclone Pam. The United States Agency for International Development. <u>https://www.usaid.gov/humanitarian-assistance/tropical-cyclone-pam</u>

Walker, Ben. (2017, November 20). An Island Nation Turns Away From Climate Migration, Despite Rising Seas. Inside Climate News. <u>https://insideclimatenews.org/news/20112017/kiribati-climate-change-</u> refugees-migration-pacific-islands-sea-level-rise-coconuts-tourism

Webb, James. (2020, February 12). Kiribati Economic Survey: Oceans of Opportunity. Asia & the Pacific Policy Studies. Volume 7, Issue 1. Crawford School of Public Policy of the Australian National University and John Wiley & Sons Australia, Ltd. <u>https://doi.org/10.1002/app5.297</u>

Weiss, Kenneth R. (2015, October 28). Kiribati's Dilemma: Before We Drown We May Die of Thirst. Scientific American. <u>https://www.scientificamerican.com/article/kiribati-s-dilemma-before-we-drown-we-may-die-of-thirst/</u>

Worland, Justin. (2015, October 9). Meet the President Trying to Save His Island Nation From Climate Change. Time. <u>https://time.com/4058851/kiribati-cliamte-change/</u>

World Bank. (2020, March 13). Sustainable Fisheries and Outer Island Transport Investments Approved for Kiribati. The World Bank. <u>https://www.worldbank.org/en/news/press-release/2020/03/13/sustainable-fisheries-and-outer-island-transport-investments-approved-for-kiribati</u>

Yeo, Sophie. (2014, September 23). Kiribati President: My people Are the Polar Bears of the Pacific. Climate Home News. <u>https://www.climatechangenews.com/2014/09/23/kiribati-president-my-people-are-the-polar-bears-of-the-south/</u>

Author's Pick

Youtube. Living in Kiribati as an American (2020, June 17). https://youtu.be/ 6hsRsF8vfU

Youtube. Kiribati Land Purchase in Fiji (2019, August 15). https://youtu.be/zsgqWyy-lal

TED Talk. My Country Will Be Underwater Soon—Unless We Work Together (2015, October). https://www.ted.com/talks/anote_tong_my_country_will_be_underwater_soon_unless_we_work_together?u tm_campaign=tedspread&utm_medium=referral&utm_source=tedcomshare

Youtube. Kiribati Vision 20 in the Face of Climate Change (2017, November 9). <u>https://voutu.be/7neSXmZiWKE</u>

UNCDP. Vulnerability Profile of Kiribati. (2018, March). <u>https://www.un.org/development/desa/dpad/wp-content/uploads/sites/45/CDP-PL-2018-6b.pdf</u>

Op-Doc. Sinking Islands, Floating Nation by Matthieu Rytz. (2018, January 24) <u>https://www.nytimes.com/video/opinion/100000005676901/sinking-islands-floating-nation.html?smid=pl-share</u>