

Cuba and the Climate Crisis: What Can the Global South Do (*What Can Cuba Do*)?

The richer nations of the world are, in the main, being excoriated by the governments, and more importantly, the populations of countries in the Global South with respect to two principal aspects of the looming climate crisis: first, that the richer nations were and are the major contributors to the crisis, and second, that the richer nations are dangerously dragging their collective feet in terms of doing something substantial about the crisis, both in the area of adaptation and the area of amelioration. Moreover, the richer countries are seriously delinquent in providing aid and assistance to the less fortunate ones. In short, the richer nations are accused of being major burners for years of greenhouse-gas-emitting fossil fuels and major delinquents today in eliminating such practices and helping other states with their own efforts -- states many of which are already experiencing major effects of the climate crisis such as drought, floods, increased frequency and fury of hurricanes/typhoons, tornadoes, and earthquakes.

These accusations are largely valid, as the almost pitiful results of COP28, held in the UAE from 30 November to 12 December this year, sadly demonstrate. The richer world is letting down seriously the poorer world. *[IF COP28 SURPRISES ALL AND REALLY DOES TAKE POSITIVE ACTION TO DEMAND THE IMMEDIATE, OR EVEN DATE-CERTAIN CESSATION OF BURNING OF FOSSIL FUELS, I WILL CHANGE THIS PARAGRAPH -- A LITTLE.]*

Let's define a couple of terms before we go further in discussing these matters. When we write "adaptation" we refer to such activities as sea wall construction, installation of river levees, large scale tree-planting projects, physical relocation of homes and facilities away from threats of flooding -- in other words, learning to live and adjust to the effects of a changing climate, in this case sea level rise (SLR) and river/glacier melt flooding (RF). By "amelioration" we refer to decisive actions to cease burning fossil fuels altogether, cease using plastics and other contributors to environmental damage and ruin, and cease the predatory capitalist economic practices that in general contribute to the climate crisis, such as destroying rain forests, haphazardly mining for essential metals, or flying atmosphere-polluting intercontinental flights to deliver strawberries from Argentina to a wintry New York.

This short paper seeks to outline how this dire situation might be changed for the better and how Cuba might make major contributions to such positive change. The first condition of such action is to listen to the "prophets" in our midst. For example: "International cooperation is not only in the best interests of all countries, but is absolutely necessary for the survival of the planet."

This is not from some *Thus Spake Zarathustra* philosopher, this is from U.S. Senator Bernie Sanders (D, VT) writing on 21 Aug 2023 in England's *The Guardian* newspaper.

As the Senator strongly and eloquently argues, if we do not cooperate we are dooming the human species on Planet Earth. Sanders writes further: "[i]nstead of spending enormous amounts of money planning for war against each other, the US and China should come to an

agreement to mutually cut their military budgets and use the savings to move aggressively to improve energy efficiency, move toward sustainable energy and...end reliance on fossil fuels. **They should also provide increased support for developing countries who are suffering from the climate crisis through no fault of their own.** [author's emphasis]

As Senator Sanders strongly implies above, how could countries like Cuba fit into and do their part in this monumental endeavor? Indeed, how can Cuba prosper at all with the unrelenting American Empire on its back? What should the government in Havana do in order to help get this train moving down the track despite receiving no help from Washington -- indeed, having the U.S. blockade to deal with -- and very little help from the Europeans or others within its own hemisphere, such as Mexico, who are struggling with their own similar predicaments?

There are ways however, upon several of which Cuba is already embarked; but there is much else that can be done. This paper -- and subsequent talk -- will focus on several of these ways. By implementing them, Cuba might even become a guiding force, an exemplar in this struggle for the continuation of human life on planet Earth.

ENERGY PRODUCTION AND DISTRIBUTION: TURNING A SOW'S EAR INTO A SILK PURSE

Cuba is presently suffering dramatically from insufficient energy. The problems range from antiquated generation systems to lack of adequate fuel to inadequate finances for change. But there is advantage in hopelessness. There is opportunity to start anew, to eradicate completely the old system and install a new, climate resilient, climate positive one. Should it be hydrogen-based? Solar? Wind-powered? Some even newer technology? Who will finance whatever is decided upon? How will the old system transition to the new? What training and education must take place? Who will undertake it? How will Cubans be recruited and trained to compose a workforce? These questions and more must be tackled and answers found. One thing is clear: the eleven million Cubans on the island, though highly talented, dedicated and hard-working, will not be sufficient; cooperation and collaboration are essential, just as Senator Sanders implied.

There is one other clear fact: one fiftieth of the money the U.S. alone wasted -- yes, wasted -- on the wars in Afghanistan, Iraq, Libya and Syria (ongoing still today), would suffice to put Cuba well on its way to success in its energy sector; indeed, to being a world leader, a role model for other states, rich and poor, to emulate.

Imagine Cuba, the pearl of the Caribbean, as the pearl also of the new energy landscape. A demonstration to the remainder of the region and, ultimately the hemisphere, of what the new energy template will look like -- or, at a minimum, one of them, as the future will no doubt witness a great deal of experimentation, trial and error, before it settles on one system, or system of systems for the long-term future.

SUSTAINABLE AGRICULTURE: A *SINE QUA NON* OF MEETING THE CLIMATE CRISIS SUCCESSFULLY

In this area, Cuba is already making progress. Margarita Fernandez, *et al*, at the Caribbean Agroecology Institute, in a paper entitled "New Opportunities, New Challenges: Harnessing Cuba's Advances in Agroecology and Sustainable Agriculture in the Context of Changing Relations with the United States", capture the positive possibilities. (See <https://www.caribbeanagroecology.org>)

The authors write that "By analyzing both the historical and contemporary processes through which agroecology has taken root in Cuba, we demonstrate that despite its uneven and incomplete implementation, such a sustainable agroecological transition holds great, untapped potential."

We can only imagine if such a transition were to take off in Cuba and then transfer to the agricultural behemoth of the United States. It would revolutionize food production overnight -- a change that is absolutely necessary if the world is to manage the oncoming climate crisis successfully. And the transformation must happen in India, Russia, China, Brazil, all over Africa and in other producers of massive amounts of foodstuffs, as well as in smaller countries like Cuba. Imagine, for instance, if in the build-back of Ukraine after its disastrous war, these new types of food production were adopted.

TRANSFORMATION AND PROTECTION OF THE WORLD'S OCEANS

Cuba already boasts some of the most pristine beaches, coastal waters, mangrove swamps, coral reefs, and fish havens left on the planet. In this regard, it has much to teach most of the remaining world. In my trips to the Island, I have listened to experts and toured areas with experts from the Environmental Defense Fund, the Oceanic Society, The Ocean Foundation, and others. From sea turtles to tarpon, from exquisite elkhorn coral to hawksbill sea turtles and Goliath Groupers, Cuba is unique in many ways. Its Gardens of the Queen exemplify this uniqueness. Here again, Cuba has much to teach other nations, especially those like the United States, India, and China who have vast seacoasts and massive marine enclaves. The positive results of cooperation and collaboration should totally outweigh the political and other antagonisms of the past. Frankly, if Washington can't visualize and help implement such cooperation and collaboration, then it needs to get out of the way and let China, India, Russia, and other states who are interested in their futures, develop what is necessary actually to experience that future. Get it started, and the U.S., however reluctantly initially, will follow. The challenge will be to ensure Washington does not damage the positive results that Cuba has already generated.

THE INTERIM: CONTRIBUTIONS TO ADAPTATION

Cuba is already a paragon of hurricane resilience, having had many opportunities to prove it. Its coastal waters and abutting shorelines are also excellent examples of what attention to these important areas can produce. Here, Cuba has much to teach others -- in preparedness, population alert procedures, and clean-up protocols. The same holds for in-shore flood control, evacuation procedures, and temporary wall construction.

The beautiful Havana harbor is an area already possessed of a strong seawall, but it's likely that its further fortification will be critical to the city's future as seas rise dramatically toward mid-century and beyond. Likewise, other Havana areas --particularly low-lying ones -- will need to be protected as much as possible, and where emergencies occur, evacuation and relocation plans drawn up. Other cities and towns close to the sea will need similar plans developed. As Cuba learns more and more about such adaptive measures, it should plan to share its knowledge with other, less fortunate members of the Caribbean community.

Home construction is another area of expertise already existing on the island; however, new and more effective ways must be developed if shoreline and near-shoreline communities are not to be driven relentlessly inward on the island. Here, "3D-Printed" construction of homes is a promising development that needs to be explored (<https://thezebra.com/resources/home/3d-printed-homes>). As Cuba develops these construction techniques and methods, it should share them widely with its island neighbors. In this regard, several Pacific island communities are already engaged in serious adaptation measures. Cuba should send delegations to these island states to share with and learn from the people of these highly-threatened communities. Likewise, delegations from these Pacific states should be welcomed to Cuba to learn from Cubans. And when relocation -- inward or higher -- is the only answer, two choices exist: (1) move inland or to higher ground; or (2) relocate people altogether, as several Pacific communities have already started to do. (See, for example, [Fifth National Climate Assessment, Chapter 30: Hawai'i and US-Affiliated Pacific Islands](#))

INFORMATION SHARING

A wealth of climate crisis information already exists -- in fact, reams of it. Cuba has such information and it needs to be shared where applicable -- as does all the remainder of such information -- in the U.S., China, Brazil, and elsewhere, with governments, NGOs, and others. Data banks need to be constructed and information widely shared.

For example, all of the U.S. military services have published "Climate Change Strategies" that are available online, or if not, should be. The Climate Security Working Group (CSWG), a forum of U.S.-based security experts and professionals chaired by the Center for Climate and Security in partnership with The Walsh School of Foreign Service at Georgetown University in Washington, DC, has published a wide range of papers and studies representing an extensive array of climate change expertise. The latest is here: <https://climateandsecurity.org/climate-securityplanforamerica/>

Likewise, the [5th National Climate Assessment \(NCA5\) 2023](#) has just been released (November 2023), published by the [US Global Change Research Program \(USGCRP\)](#) which comprises 14 U.S. federal agencies including the Department of Defense. It took four years to produce, had 500-plus federal and non-federal authors, and multiple rounds of extensive agency review, public comment, and external peer review conducted by the National Academies of Sciences, Engineering, and Medicine.

A wealth of climate crisis information is available from the United Nations Framework Convention on Climate Change (UNFCCC), including its latest report on Latin America and the Caribbean (10 November 2023), here: <https://unfccc.int/news/enhancing-climate-transparency-in-latin-america-and-the-caribbean>

THE ULTIMATE CHALLENGE FOR CUBA

Given the abysmal record of "*el coloso del norte*" over the past 70-plus years and the near-certainty of little change in U.S. Cuba policy in the short term, much of what has been suggested above seems like a pipedream. Despite the efforts of others, from neighbors throughout the Caribbean and Latin America, to the European Union member states, to the promising initiatives associated with China's Belt and Road (BRI) proposals, without the U.S. at least in a cooperative mode, such efforts as even the minimal ones outlined here appear to have little possibility of coming to fruition. But there is change in the air, massive change.

The U.S. stands at a crucial crossroads in its world relations. Seen by much of the world -- and all of the Global South nations -- as the source of increasingly negative impacts on the world, the U.S. will be compelled to alter course, or go out of business altogether. At present, with 33 trillion dollars (US) aggregate debt, a Congress unable to govern, a presidency in grave question, and a people divided as badly as in 1860, the nation's future is at stake. Involved in war after war since the terrorist attacks of 11 September 2001 -- *all failed wars* -- supporting another failed war with billions of dollars in Ukraine and another that is a humanitarian disaster in the Middle East, the U.S. empire is tottering.

But there are 340 million people from the Atlantic to the Pacific and several more millions in overseas states or territories -- a huge population with enormous potential. This potential cannot be realized if climate change wipes us all out. Sooner or later, U.S. leadership must comprehend this simple fact: the climate crisis is existential. There will be no afterward, or at least not one with human life on Planet Earth.

When this revelation strikes Washington, Cuba should be ready to go. In the meantime, there are many in the U.S. who are willing to help in any way they can; in fact, in reality the great majority of Americans are, outside of Washington.

In the meantime, countries like China, India, Russia, and others can assist -- assistance that just might spark the U.S. to move with more alacrity to help as well.

It's high time we all realize the gravity of the climate crisis. Cuba, always batting well above its weight, is already a leader. But more can be done. And it is always good to consult the wisdom of the ages: "*A society grows great when old men plant trees whose shade they know they shall never sit in.*"

~ *Greek proverb*

