



Observations from the Pacific Futures Conference, 18 October 2019

Penehuro Lefale.

Last Friday (October 18, 2019), I had the privilege of moderating a panel on climate change, at the [Pacific Futures: *Connections, Identity and Security Conference*](https://www.nziiia.org.nz/home.aspx) hosted by the New Zealand International Institute Affairs (NZIIA), Victoria University of Wellington, New Zealand <https://www.nziiia.org.nz/home.aspx>. The Conference focused on the Pacific – the influences shaping its future and some of its biggest challenges.

The keynote addresses were delivered by Hon. Winston Peters, Deputy Prime Minister of New Zealand and Minister of Foreign Affairs, and Hon. Afioga Fiame Naomi Mataafa, Deputy Prime Minister of Samoa and Minister of Natural Resources and Environment. Both speakers reaffirmed the new and emerging geopolitical and geo-strategic challenges facing the region – ranging from the impacts of New Zealand’s new Pacific foreign policy (New Zealand Reset Strategy), and other foreign states (re) engagement with the Pacific (China’s “One Belt, One Road” (OBOR), Australia’s “Step-up,” United Kingdom’s “Uplift,” and Indonesia’s “Elevation”) primarily targeting issues of drug trafficking, climate change, and security.

Our panel addressed climate change in Pacific communities. Climate change is a collective action problem at the global scale because greenhouse gas emissions do not recognise political boundaries. Emissions accumulate over time and mix globally. Emissions by any agent (e.g. individual, community, company, government) affect other agents. International coordination is therefore required to effectively address the challenge.

During my introduction to our panel session, I argued that the common notion that “climate change remains the single biggest threat to the livelihoods, security, and wellbeing of the peoples of the Pacific” needs to be reframed. Energy security is the flip side of climate change and it is by far the single greatest threat to Pacific futures. Safeguarding Pacific futures depends largely on energy security. Energy (fossil fuels) is arguably the biggest industry in the world. Fossil fuels received USD\$425 billion subsidies in 2015 http://www.ilea.co.nz/resources/Final_02082018_Lefale_CCTalanoaAnthropocene.pdf.ⁱ Stable, secure, and least cost international energy (fossil fuels in particular) policies are critical for Pacific futures.

A major challenge for Pacific communities is making sure the economic impacts of energy (fossil fuels and climate) policies and measures are kept at minimal levels. Pacific communities have and continue to pay at least double or triple world market prices for imported petroleum products, due to the region’s scale and isolation from world petroleum markets. Any additional levy (e.g. carbon taxes) imposed on imported petroleum products will further increase the costs for Pacific communities – especially in the aviation and shipping sectors, the key sectors (tourism and fishing) to economies of Pacific communities.

Fossil-fuel burning and cement production release ~90% of all CO² emissions from human activities, with net deforestation releasing the remaining 10% in 2018 (R B Jackson et al 2018 Environ. Res. Lett. 13 120401 <https://iopscience.iop.org/article/10.1088/1748-9326/aaf303> According to Jackson et al., (2018), after a three-year hiatus with stable global emissions from 2014 to 2016, CO₂

emissions grew by 1.4% in 2017 and 2.1% in 2018 to 37 Gt (billion tonnes), and are expected to continue to grow in 2019. These figures point to the reality of climate policy to date – climate talks do not match climate actions. The talk of decarbonising the global economy dominated by fossil fuels is not easy. It is complex.

In the face of fossil fuel domination and climate change, what can we do? I have argued since 2010 that Pacific communities need to engage in international conversation about research and development of large-scale technological solutions like geoengineering (broadly also known as climate engineering). Geoengineering refers to large scale negative emissions technologies (e.g. carbon dioxide removal (CDR) like afforestation) and technologies that alter the earth's radiation balance (e.g. Solar Geoengineering (SG) – also known as Solar Radiation Modification or Management (SRM)).

At present, Pacific communities are passive observers in international geoengineering conversations, especially in the SG debate. One needs to sit at the negotiating table, “or be on the menu.” Of the two technologies, SG is the most controversial due to its unique features - planetary in scale with unequal distribution of potential impacts and benefits. There will be losers and winners. Based on my research to date, the science of geoengineering like SG is widely accepted. It is the governance of research and development which is the challenge. (See the following video for a better understanding of the science of SRM:

<https://www.youtube.com/watch?v=ReBPqguolu8&fbclid=IwAR35EnV5vLVjZBC4OGknJhNIPwsvli3Z9inS4d55eMNonpkkL3-YhMILNsⁱⁱ>).

At present, there are no international governing mechanisms or rules on geoengineering. Any individual or country can go ahead researching and ultimately developing geoengineering technologies. Questions for the Pacific remain: Is geoengineering acceptable to them? Who has the right to deploy geoengineering technologies once they are fully developed? Who pays for geoengineering harms? What about the slippery slope and moral hazard challenges? I did not have time to discuss these challenges in detail at the Conference, but these are important questions that need to be considered carefully by the Pacific community (see “[Lefale and Anderson \(2019\): Climate engineering and small island states: panacea or catastrophe?ⁱⁱⁱ](#)”).

Within the time I had at the conference for discussion, I contended that SG could be the panacea for the climate problems we face or the catastrophe we need to confront in our region. It can be considered as an “insurance policy instrument.” Climate change challenge can be likened to treating “cancer” in a patient. The best option is to cure the cancer – that is, to deal with the cause of the disease. In the case of the climate challenge, CDR (and Nationally determined Contributions (NDCs)) are the primary climate actions needed to slow down climate change. But these are not happening quickly enough to “save the patient.” Thus, the need to fast-track research on SG technologies – the chemotherapy treatment our planet's atmosphere desperately needs to counteract and slow down global heating, while hoping governmental efforts to decarbonize the global economy will happen faster than it has happened in the past 30 years. Can we afford to wait until Governments come up with alternatives to fossil fuels? (Or, in regard to the analogy, will the cancer patient survive the negotiations about which type of chemotherapy or radiation might kill the cancer faster than the cancer kills the patient?) Most of us climate analysts and independent observers of the UNFCCC and Paris Agreement negotiations are not optimistic for a swift solution.

After the conference, I met up briefly with one of the Conference Keynote speakers, Samoa's Deputy Prime Minister Fiame Mataafa. She thanked me for my “lecture” and simply said, “cancer kills.” And I replied, “climate, as well.”

ⁱ Lefale, P.F. 2018. "Pacific Climate Change Talanoa in the Anthropocene."

http://www.ilea.co.nz/resources/Final_02082018_Lefale_CCTalanoaAnthropocene.pdf.

ⁱⁱ Ellis, Lauren. 2019, October 13. Why the World's First Solargeoengineering Test is so Controversial. Ed., Deisler, Amanda. Video produced in association with Harvard University's Solar Geoengineering Research Program, <https://www.youtube.com/watch?v=ReBPqguolu8&fbclid=IwAR35EnV5vLVjzZBC4OGknJhNIPwsvli3Z9jnS4d55eMNonpkkL3-YhMILNs>

ⁱⁱⁱ Lefale, P.F. and C.L. Anderson. (2019). Climate engineering and small island states: panacea or catastrophe?" *Geoengineering our Climate? Ethics, Politics, and Governance*. Edited by Jason J. Blackstock and Sean Low, Routledge, 2 Park Square, Milton Park, Oxon OX14 4RN, pp. 159-163.