

Opening Remarks by
His Excellency Ambassador Peter Thomson,
UN Secretary-General Special Envoy for the Ocean
Global Geodesy Forum
22 April 2021

Ladies and Gentlemen, Colleagues, Friends,

Greetings to you all as we gather together in cyberspace. I hope that wherever and whatever your circumstances, that you and your families are safe and well. And I trust that everyone is finding it in their hearts to exercise the best of human traits: of sharing, of empathy and of kindness to our fellows in the midst of this pandemic. We are all connected, to each other and to every other thing on this planet.

One of the reasons I have great respect for individuals, is that each of us is a world expert – if only on the subject of ourselves. Generally speaking, we also have a better knowledge of our backyard than anyone else - unless your neighbour happens to think that backyard belongs to them! And that's where geodesy comes in!

When I began my public service career, it was as a government officer in charge of a district in rural Fiji. A good District Officer knows every corner of his district, travelling in small boats to outer islands or up muddy tracks into the hill country to meet with the people of the hundred or so villages and settlements of a district. Despite the fact that our Ministry of Lands and Mineral Resources published excellent maps, I never once looked at a map of my district that was 100% accurate. Why was that?

Apart from the occasional blatant error, it was because things change. Urbanisation trends mean some age-old settlements on the map just no longer exist. Urban expansion causes creeks to disappear, mangroves and mudflats to succumb to reclamation for buildings, and roads and bridges to multiply. Floods, erosion and silt shift river courses and the myriad channels of delta lands. Foreshore currents and storms realign foreshores. Change is in fact is a constant.

Out on the barrier reef of the peninsula where I was born and grew up, there is a small island called Makaluva that had a big lighthouse on its beach and wooden cottages that my parents used to rent for family holidays. An earthquake in 1955 opened up fissures in the reef and that caused changes to the local sea currents, resulting in one end of Makaluva being eaten

away and the other end continuously extending a sandspit that gradually became covered with vegetation and trees. Every year we went there, more trees and cottages had toppled into the sea, until eventually all of the old island was gone, leaving only the adamant lighthouse surrounded by water, a lonely relic of what used to be, while the new island continued its sea slug journey away across the reef. Makaluva's fate was an early alert that change was afoot, but it took a few more years to pass before I learnt about tectonic plates and the fact that whole continents were on the move. Eventually the centrality of Geodesy dawned, and here we are at the Global Geodesy Forum today.

Ladies and Gentlemen,

On a more sombre note, please allow me to place today's discussions within the context of the times in which we live. In his State of the Planet address delivered at Columbia University in New York last December, the UN Secretary-General, Antonio Guterres, said humanity is waging a suicidal war upon Nature. He reported that one million species are at risk of extinction and that ecosystems are disappearing before our eyes. He said the Ocean is being overfished, is increasingly choking with plastic waste and that due to anthropogenic GHG emissions, coral reefs are bleaching and dying.

And then this week WMO's State of the Global Climate 2020 was released. Addressing the press conference to mark the release, the WMO Secretary-General, Professor Taalas, said, "All key climate indicators and associated impact information provided in this report highlight relentless, continuing climate change, an increasing occurrence and intensification of extreme events, and severe losses and damage, affecting people, societies and economies. The negative trend in climate will continue for the coming decades independent of our success in mitigation."

A reasonable person draws two immediate conclusions from these unimpeachable descriptions of the context of our times. The first is that we must make peace with Nature, immediately and without pre-conditions. We must get to the peace table and establish a relationship of respect for and balance within Nature's embrace. In that regard, the immediate requirement is for all of us to commit to fundamental transformations that will deliver us a net-zero carbon world by 2050.

The second conclusion is that if humanity is going to be able to cope with these massive changes, investment in adaptation must get underway without further delay. One of the most powerful ways to adapt for resilience is to invest in early warning services and observing networks and here again our reliance on Geodesy becomes clear.

Ladies and Gentlemen,

I served as Fiji's Permanent Representative to the United Nations from 2010 to 2016. During that time, I learned about the United Nations Committee of Experts on Global Geospatial Information Management, the UN-GGIM, and the work it was doing on geospatial information. In so doing I became aware of the science of Geodesy, the accurate measurement and understanding of the fundamental properties of the Earth, its geometric shape, its orientation in space, and its gravity field. With all the inherent challenges of sustainable development in the face of Climate Change, of rising sea levels and increasing occurrence and ferocity of destructive tropical cyclones, the importance of Geodesy and the accuracy of its observations and predictions for my country and so many other coastal and island States, became obvious.

In 2015 I had the privilege at the UN General Assembly of introducing a resolution entitled 'A Global Geodetic Reference Frame for Sustainable Development'. Co-sponsored by 52 countries, it was the first UN resolution to recognize the importance of a globally coordinated approach to Geodesy. The resolution emphasized that no one country could do the job alone and called for greater multilateral cooperation on Geodesy to ensure the development, sustainability and advancement of the GGRF, the Global Geodetic Reference Frame. You will hear more about the GGRF during today's discussions.

The importance of having accurate measurements cannot be overstated. They alone lead to the sound information required by decision-makers and countries in order to make evidence-based decisions in relation to global change, including climate mitigation, adaptation and preparedness. Accurate measurements of changes in sea level, in ice cover, the atmosphere, and in the Earth's crust: this is fundamentally what Geodesy is about.

As you all know, the benefits of Geodesy extend to everyday products and applications using positioning and navigation services, such as car navigation systems and the applications on our mobile phones. But Geodesy suffers from being so fundamental that it is often ignored and under-appreciated, resulting in it being under-resourced. Growing demands on Geodesy, combined with aging infrastructure, has highlighted some weak links in the global Geodesy chain. We therefore have work to do in strengthening these weak links.

Ladies and Gentlemen,

Our gathering here in the Global Geodesy Forum under the theme of “The Power of Where: The Value of Geodesy to Society” is particularly pertinent on Earth Day 2021, with its theme of “Restore our Earth.” Let us ensure that our discussions proceed within the context of our times, as described earlier in my remarks to you today.

I commend the UN-GGIM Subcommittee on Geodesy for the two years of hard work that resulted in the Position Paper on Sustaining the Global Geodetic Reference Frame, and the Concept Paper on Establishing a Global Geodetic Centre of Excellence. Taken together, these represent a long-term strategy and action plan to realise the call by the UN General Assembly in its resolution of 2015 to develop a common global geodetic reference frame.

I also take this opportunity to applaud the Government of Germany for its formal offer to host and establish a Global Geodetic Centre of Excellence at the United Nations Campus in Bonn. This is a decisive step taken in the spirit of the 2015 UN resolution and I’m confident it will result in the enhancement of multilateral cooperation in the development of a more sustainable global geodetic reference frame. I look forward to assisting the establishment of the Global Geodetic Centre of Excellence.

Let us recognize the need to raise awareness of the importance of Geodesy, especially to decision-makers and in particular for developing countries that lack infrastructure and require technical assistance. Geodesy is one more brick in the hall of human understanding that we are all connected and that we are only as strong as our weakest link. I hope this Global Forum will provide Member States and key stakeholders with an opportunity to better understand how reliant we are on the science of Geodesy; and eagerly await the full outcomes of today’s Forum.

I am honoured to have been asked to serve as UN-GGIM’s Global Geodesy Ambassador and will do my best in this role to advocate and promote the good works of Geodesy. Thank you all for participating in this discussion, and for your attention to my words.

Earth Day
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