

CLIMATE DISPLACEMENT IN TUVALU. PHOTOGRAPHS BY JOCELYN CARLIN.



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POST TENEBRAS LUX

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If you would like to find out how you can help the people of Tuvalu in their quest for a brighter future and to keep abreast of developments relating to our Climate Change and Displacement Initiative, please feel free to have a look at the Displacement Solutions website

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Cover A traditional Tuvaluan weaving.

Tuvalu's Looming Fate

For the Moment, Tuvalu's Sitting Tight

Over the past decade, the tiny atoll nation of Tuvalu has been in the global spotlight as one of the countries most vulnerable to climate change. With only 26km² of land at a maximum height of just below five meters, the 11,000 people that call Tuvalu home are some of the most at risk of becoming subject to permanent displacement as seas rise and temperatures increase. Because of its unparalleled vulnerability, the country has been particularly vocal in seeking appropriate international climate action since its admission to the United Nations in September 2000.

Graphic images and accounts of king tides already ravaging the country have helped to spread word throughout the world about the tragic situation Tuvalu faces, as it struggles to find a viable solution for its people that will include the maintenance of its sovereignty, the preservation of its culture, the protection of its land and the rights of its citizens. However, despite this global attention and the responsibility of richer, developed countries to remedy the crisis they have created, very little has been done thus far by the international community to assist in finding such solutions. Projects to capture rainwater and improve waste management and food security have been generously supported

by donors, but comprehensive adaptation financing and programmes to expansively tackle both climate change effects and lingering hurdles to social and economic development remain to be seen.

As part of its Climate Change and Displacement Initiative (CCDI), a team from Displacement Solutions (DS) and UN-HABITAT carried out its second mission to Tuvalu in September 2011 to assess the climate change threats facing the country, and in particular, to begin the process of devising human rights-based plans to better address potential climate displacement and secure for the people of Tuvalu the best possible outcome to their many predicaments. After conducting thorough research and convening numerous meetings with representatives from NGOs and various Government departments in Tuvalu, the team found that concrete solutions to climate displacement do exist, and these combined with new approaches to ongoing socio-economic problems in the country (borrow pits, refuse disposal, access to water and so forth) can be pursued now by the Tuvaluan Government in a manner that could have a markedly positive impact upon the lives of the body politic. To achieve this, however, will require considerable increases in support by the international community to ensure that such measures can effectively prevent mass

displacement and improve overall living conditions in the country. Something akin to a Tuvalu Development Initiative (TDI) that simultaneously tackled climate change and socio-economic challenges could make a real difference.

This photo essay captures the essence of daily life in Tuvalu and reveals beyond any doubt that this is a country, a place and a people truly worth saving. Further, it shows that Tuvalu and exisiting Tuvaluans are a place and a people capable of being saved. It reveals that the injustice of climate change can still be averted. This is the third photo essay published by Displacement Solutions in a series presenting the ordinary lives of people at the frontline of real and likely climate displacement.

Developing effective, practical and realistic responses to the prospect of climate displacement is particularly important in the instance of Tuvalu, because so much is at stake. Not only is Tuvalu's entire land mass threatened by climate change, but also, its vibrant and rich culture is endangered. Despite the powerful and seductive temptations generated by globalisation in Tuvalu, the core Tuvaluan culture, founded on both a prioritisation of community living and a strong connection to the land, remains very much intact. Each day Tuvaluans spend their time in the company of friends and

family, fishing traditionally, participating in a ceremonial fatele, or playing sports on the airport runway as afternoon melts into night. Without overromantising matters, (for Tuvalu has some distance to travel before every citizen enjoys in full, the entire spectrum of internationally recognised human rights) spending time in Tuvalu, one sees a way of life that is more relaxed and harmonious than that found in many other places. Fans of Aldous Huxley's final book *Island* will note more than a few similarities between Tuvalu and Pala, the mythical island utopian paradise under constant external threats, the ultimate demise of which remains heartbreaking. The strength and beauty of the culture of this modern day Pala, which can be glimpsed in the photos that follow, uncover the invaluable nature of this land and its people and why the world must do whatever it can to preserve the life and livelihoods of Tuvalu.

Protecting Life and Culture in Tuvalu

Though neighbouring Kiribati seems clearly to be leaning in the direction of the eventual 'dignified migration' of its population, the Government of Tuvalu, and what appears to be a clear majority of the population is committed to ensuring that, for as long as possible, Tuvaluans are able to

continue residing safely in their home country. The Government's approach to climate change thus far involves solely pursuing adaptation measures, with a focus on ensuring water security and the protection of infrastructure from sea-level rise. Clearly, with rising sea-levels, and the increasingly frequent occurrence of natural disasters associated with climate change, these measures are crucial. Indeed, increasingly severe natural disasters have already been experienced and documented in Tuvalu in recent years, including a number of dramatic king tides, and the recent drought, which received considerable international media attention. The drought was so severe, in fact, that schools were closed and a national state of emergency was proclaimed in October 2011.

Similar to other atoll and island nations grappling with the dual challenges of climate change and ongoing poverty and economic stagnation, it is clear that Tuvalu will need to expand both their adaptation measures, as well as national policies geared towards the protection of basic economic and social rights. As we met with Tuvaluans during our September 2011 visit, we noticed a sense of palpable anxiety about the effects of climate change, and in particular, the threat this might pose for the children of this country.

Massive up-scaling of adaptation efforts, carried out and driven by the population themselves, with increased donor support, will give these citizens real protection, as well as encouraging a muchneeded psychological sense of security. In terms of engineering-based adaptation solutions, Melton Tauito, the National Climate Change Coordinator, estimates that the construction of a seawall around Fogafale, the main islet of Funafuti where almost half of the population resides, would only cost \$30 million. Although this measure is more expensive than any other climate change projects that have been pursued thus far in Tuvalu, and would require ongoing maintenance, exploring the feasibility of complete solutions such as this seems highly beneficial. Not only will they prolong the habitability of this important, heavily populated islet, but also may allow it to remain a Tuvaluan land mass, ensuring the ongoing protection of the country's sovereignty.

Adaptation and Development Must Be Pursued Simultaneously

Although far larger-scale adaptation measures must be pursued for the sake of Tuvalu's ongoing habitation and sovereignty, a number of other development issues also threaten to undermine the economic and social rights of Tuvaluans, including

housing, land and property rights. With a GDP of only US\$ 36 million, the lowest of any country in the world, the financial capacity of Tuyalu to carry out adaptation measures sufficient to protect the country from both the short- and long-term effects of climate change is greatly limited. Similarly, even though per capita GDP is a relatively respectable US\$ 3,400, the Government's ability - even when the political will exists to do so - to secure the full spectrum of economic and social rights is restricted. Tuvalu faces serious problems relating to overcrowding, the rise of urban slums, a lack of sanitation, severe drought and water shortages, the unresolved issue of what to do about the nine highly polluted borrow pits in Funafuti and ongoing problems with waste management, all of which will only worsen with the effects of climate change.

We believe strongly that Tuvalu's adaptation and development needs can be sustainably and adequately addressed if the approaches taken to these issues are simultaneously coordinated and backed solidly by the international community. In terms of economic measures, investment in eco-tourism - an industry that seems to have obvious potential in Tuvalu when one visits the beautiful outer islets of Funafuti which are teeming with wildlife - could well boost Tuvalu's

GDP, as could the development of outer islet agricultural industries, such as the production of the antioxidant-rich noni juice. This latter measure would have the additional benefit of encouraging migration back to these outer islets. With proper support, the contaminated borrow pits could be turned into shrimp farms that flush with the tide, providing both a source of food, land, income and employment as well as a solution to a pressing sanitation issue. Water shortages can be addressed by repairing dysfunctional water tanks, as well as harvesting water from the edges of the airport runway, by far the largest flat space in the country. These measures, combined with creative adaptation measures including seawall construction, enhanced food security and contingency planning for long-term migration should this be required, need support from both the Government and the international community.

And What of Migration?

In contrast to similarly threatened Kiribati which is leaning ever more distinctly towards a 'dignified migration' approach to climate change, the Government of Tuvalu has continually expressed its intention to pursue only domestic adaptation measures, based on the strong desire among

Tuvaluans to stay in their country of birth. To date migration options have not been thoroughly considered or planned by the Government. Indeed, Tuvalu rejected a recent offer from New Zealand to increase the annual quota of Tuvaluans accepted as migrants under the Pacific Access Category. Tuvalu rightly believes that it has a legitimate right to demand that the countries responsible for causing climate change provide funding for adaptation projects to allow its citizens to continue living on their present land plots. And yet, the funds thus far provided to Tuvalu have been minimal. As Displacement Solutions has suggested with respect to other climate-affected countries, we believe that funding earmarks should be made for Tuvalu within the global Green Fund to ensure that the country receives its fair share of international support.

At the same time, however, planning for Tuvalu's future based solely on the hopeful presumption that either the Government and/or the international community will provide the financial resources required to secure long-term habitation of the country, is clearly only part of what should be a comprehensive approach to the management of the effects of climate change, grounded in all possible climate eventualities. As such, while we believe the consistent approach of the Government

to focus on remaining in Tuvalu is a laudable and understandable one, it would equally be prudent for the Tuvaluan Government to investigate migration options in addition to adaptation, to ensure the long-term protection of its citizens' human rights.

In considering the possibility of eventual resettlement, the Tuvaluan Government would not be promoting something with which the country is not already very familiar; migration has been a common occurrence in the Pacific and Tuvalu for many decades with thousands of Tuvaluans permanently resident in New Zealand. In addition, labour migration has occurred whereby Tuvaluans have worked at plantations in Samoa and Queensland, Australia, as well as at phosphate mines in Banaba Island, Kiribati, and Nauru. Internal migration from the outer islands to Funafuti has also been substantial since the late 1990's, and still continues today, as does the temporary migration of students to Fiji to study at the University of the South Pacific.

Migration plans to assist Tuvaluans could take many forms. The most substantial programmes exist in New Zealand, whereby 75 Tuvaluan migrants are accepted each year under the Pacific Access Category (PAC), and Tuvaluans are able to work in New Zealand's agriculture sector for a period of six to nine months under the seasonal migration scheme. However, even these projects seem to fall short of sufficiently providing for Tuvaluan's needs: the acceptance threshold for the PAC is difficult to meet for Tuvaluans, and the annual quota is seldom filled. To prevent brain drain, and to allow a sufficient number of Tuvaluans to migrate to New Zealand, these conditions should be relaxed, and measures should be undertaken to ensure that the Tuvaluan culture is supported in Auckland, where most migrant Tuvaluans live. As the regional economic superpower, Australia has a strong responsibility to accept a far larger number of Tuvaluan migrants - currently only 300 or so Tuvaluans are living in Australia and to expand its seasonal migration schemes. Migration schemes such as this will help to reduce overcrowding in Tuvalu and encourage stronger ties between Tuvaluans and these potential host countries, making any large-scale future migration more likely to be successful for all parties involved.

In perhaps the largest migration by Tuvaluans in recent decades, a segment of the population of the island of Vaitupu migrated successfully to the Fijian island of Kioa in 1946. Kioa was purchased as a freehold settlement for Tuvaluans in 1951, and a small but steady flow of migration there, from Tuvalu, has occurred. It has been

suggested that a large proportion of Tuvaluans could move to Kioa as climate change worsens, and that this island could act as a safe-haven for the Tuvaluan culture and language. Further research is required to determine how many people could realistically and sustainably live on Kioa Island, and how much it would cost to carry out sufficient development projects to allow a larger number to migrate there. Additionally, the conditions, if any, under which Fiji would grant Tuvalu sovereignty over the land must be determined.

We believe that it would serve the interests of the people of Tuvalu and the Government to develop systematic contingency plans involving possible resettlement of the Tuvaluan population in places such as Kioa Island and elsewhere to ensure that countries in the Pacific region are open and politically prepared to possibly host Tuvaluans should the fateful day of migration come to pass. Not only would migration planning be wise politics, but they may well be consistent with the wishes of many Tuvaluans. Recent national surveys conducted by Melton Tauito have revealed that the majority of the Tuvaluan population would look favourably upon the Government

investigating migration options. As much as the Government and people of Tuvalu understandably wish to remain within their cherished homeland, many Tuvaluans and their families have personal migration plans already, which they will pursue if severe climate change events come to pass. With a large proportion of Tuvaluans living and working internationally - particularly in Auckland, New Zealand, where some 3,000 Tuvaluan migrants reside - most foresee that they will simply join their families and friends overseas. Given that New Zealand accepts between 40,000-50,000 migrants each year, it seems a distinct possibility that the personal plans of many Tuvaluans may, in fact, succeed.

What Next?

The vexing question that both the Government and the governed in Tuvalu and the international community face in relation to the world's smallest nation is: how can the Tuvaluan way of life be preserved, the enjoyment of human rights strengthened and the socio-economic fabric of the society be enhanced, while simultaneously securing the future in the face of what will be a long battle with climate change? At the most fundamental level, Tuvalu needs to stand on its

own feet rather than being reliant on aid or ongoing and expanded development assistance for its survival and prosperity. At the same time, it is self-evident that quantum increases in adaptation funding will be necessary to ensure that the measures required are taken in relation to basic infrastructure – clean water, sanitation and coastal erosion, all of which can assist in protecting the country against some of the ravages of climate change, while at the same time, improving living conditions.

At the level of the private sector, and given Tuvalu's tiny size, comparatively small investments from companies from Australia or New Zealand could provide instrumentally important seed-funding and more structural capital assistance to projects such as the production and international marketing of noni juice, greatly expanded eco-tourism, the development of aqua-culture in the borrow pits, and finally managing the debilitating rubbish problem, all of which would greatly improve the quality of life in the country.

Such investments, (which can very easily become highly profitable), combined with new adaptation funding and more refined, comprehensive attention to the question of labour migration and planning for the possible mass resettlement to places such

as Kioa Island, may hold out the greatest hope for the people of Tuvalu, both now and into a long, sustainable and distant future.

In 2012 it is still not too late to ensure the survival of Tuvalu and its people. Renewed efforts by the Government, together with an invigorated international community, infused with funding this country so desperately deserves and needs, can still ensure that the children of today live their lives knowing that somewhere, in the distant middle of the Pacific, there lies a sovereign country called Tuvalu.

Scott Leckie

Director and Founder – Displacement Solutions.





During king tides and storm surges, Funafuti is prone to serious flooding. These extreme weather events are only predicted to increase in severity and frequency as the phenomenon of climate change intensifies.



Land reclamation is popular in Tuvalu, given that erosion eats away at the coral atolls, particularly during high tides and storm surges. In this process, old tin drums are filled with concrete, which sets and remains even after the tin rusts away. Meanwhile, compressed rubbish is used to fill ground space on the inside of the seawall.

In 1942, during WWII, the American military used Funafuti as a strategic base in their fight against the Japanese in the Pacific region. To create a runway on Funafuti, the Americans "borrowed" coral and sand from the then unpopulated part of the islet. The land was never restored. Sixty years on, the population of the nation's capital has increased tenfold, and people are forced to live on and around these tidal pools, which span four hectares and are littered with the detritus of modern Tuvaluan life.





Young boys and girls will play in the lagoon all day long during school holidays; swimming, playing and keeping cool. When hungry, these children will often catch and eat reef fish, which go especially well with fresh coconut, which hang from the trees overhead.



A young boy plays on a rocky beach on the ocean side of the island while his father fishes for his family's dinner.



A nice house on Fogafale
– the main islet of Funafuti
where half of the Tuvaluan
population reside.

A family home in the "taisala", or "borrow pits", where migrant outer-islanders have formed squatter settlements since Tuvalu's Independence in 1978. The customary land system in Tuvalu prevents these migrants from owning land or building permanent structures, so dwellings are constructed with whatever materials can be found.



The inhabitants of the borrow pits survive despite living in severe poverty. Indeed, the children in these communities are as bright and curious as any others in Tuvalu.





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No one truly knows the scale of the climate change challenges that these kindergarten children will face in their lifetime. Nonetheless, DS believes that the people of Tuvalu should develop systematic contingency plans to ensure that other countries in the Pacific region are willing to possibly host Tuvaluans if migration were to become inevitable.



Nanny teaches children at Vaiaku Kindergarten, Fogafale. The Tuvaluan Government is placing an emphasis on education, as it believes that having an educated population will help carry Tuvalu through the uncertain times ahead.





Malofou Auina, a young man whose heart's desire is to stay on his home island, Funafuti. Valuing the calm island lifestyle, Malofou is keen to develop both an eco-tourism business involving camping, fishing and diving on uninhabited islets and a business exporting fish to New Zealand. DS believes that private enterprises like these should be supported by the international community as they could significantly help boost Tuvalu's GDP – which is the lowest of any country in the world – and correspondingly increase the country's ability to deal with the effects of climate change.

People from the outer island of Nanumea who now live on Funafuti celebrate their heritage at a fatele – a traditional celebration in which songs and dances retell stories of their ancestry - during Nanumea week.

London Sefanoia sits by her husband's grave with her young grandchild. Although, throughout her life, London saw the greatest changes that Tuvalu has experienced in centuries associated with western influence and the introduction of various technologies, there is no doubt that her grandson will witness even more dramatic transformations over the course of his life.





Frank Koloa and Tali Ulisese are most happy when using traditional techniques to fend for themselves on the outer islets of Funafuti.

It would be prudent for the Tuvaluan Government to investigate migration options in addition to adaptation, to ensure the long-term protection of the human rights of its citizens.



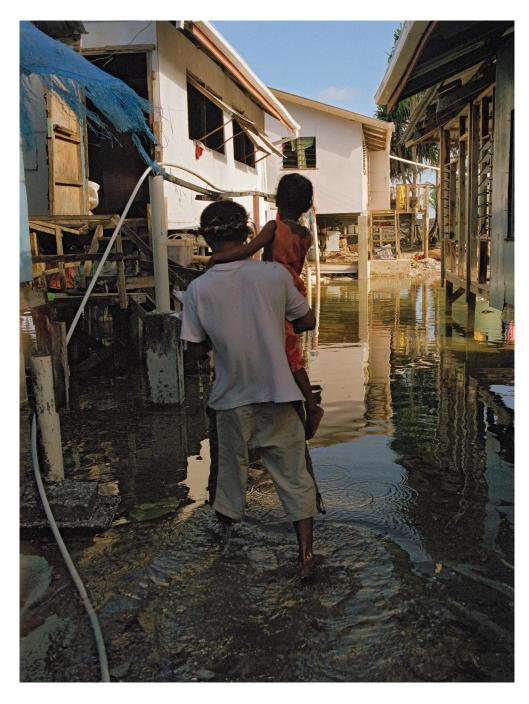
Fakamisi (Nancy) Uelesone, 16, lives in a squatter settlement by a borrow pit. Though Nancy is bright and keen to learn, she has little opportunity to find a life away from her family and the village in which she was born.



Tofiga tends his vegetable garden – a new and exciting pastime for a number of families on Funafuti, as a consequence of an NGO initiative that provides both seedlings and expert advice. These new gardening techniques, however, fall by the wayside during times of drought, as they did during the particularly dire 2011 drought.



Tofiga holds up a Pulaka – a food which is rare and reserved mainly for the elite. Pulaka now grows in fewer places as salt water intrusion often contaminates the deep pits in which they are grown.



As a result of salt water intrusion, a father and child must walk through tidal waters to reach their home beside a borrow pit.

When the borrow pits flood, the waste that has accumulated in them spreads across the islet, creating a concerning health risk for those outer island migrants who must live in their vicinity.

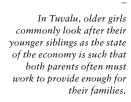




Many Tuvaluans are devout Christians, as is London Sefanoia, who is pictured in her home, reading from her bible. This biblical reverence has, at times, created problems for those attempting to address climate change, as several pastors maintain that climate change was a fiction as God promised in the Old Testament to never allow the earth to flood again after the time of Noah.



This ocean, which has provided the Tuvaluans with sustenance for so many centuries, now threatens – with rising levels and increasing storm surges - to make life unviable in this lovable, low-lying island country.







In fakaifou – squatter settlements of outer island migrants – there are no services, and fresh water has to be collected directly from the tanks.



A young man carries water to his home. Given the scarcity of water in Tuvalu, his family will use it sparingly.

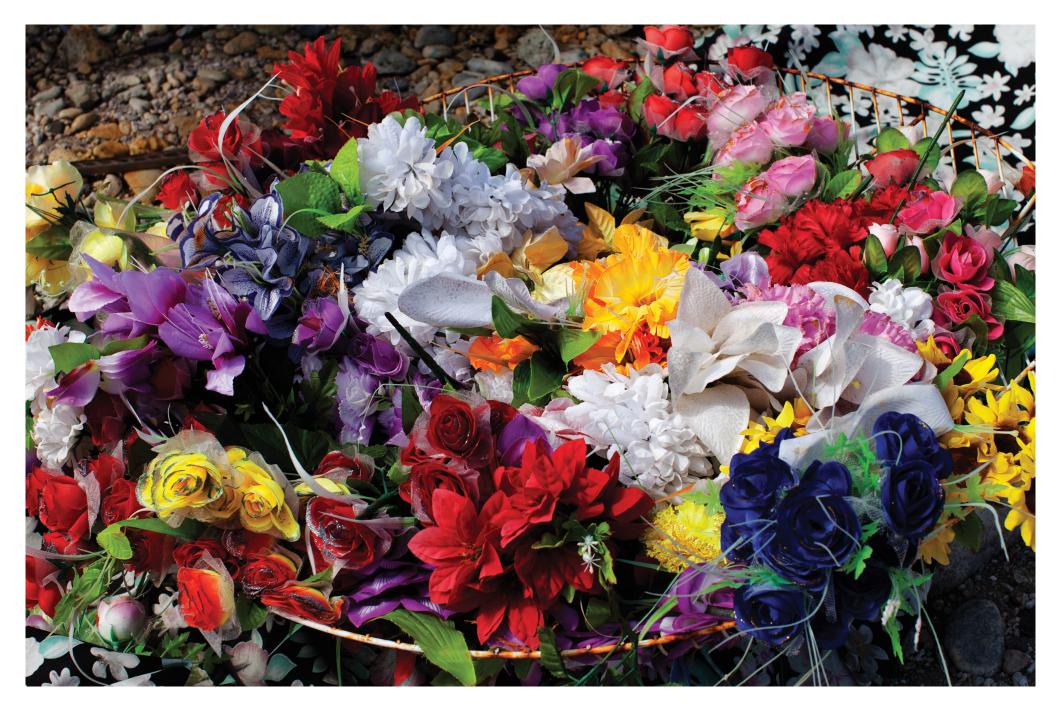


Otinielu Tausi, the longest serving Government Minister, is now retired and has committed himself to the task of making his entire family self-sufficient, utilizing fruit and vegetables from his elaborate garden, and meat from his pigs. However, for Otinielu and other Tuvaluans to truly achieve self-sufficiency depends upon their access to reliable sources of water, which is problematic considering that droughts are predicted to increase in Tuvalu as a consequence of climate change. Otinielu believes that the answer lies in enforcing building regulations that require large concrete rainwater catchments to be built beneath every new house.



Otinielu Tausi stands resplendent in a shell necklace, which he received during the 1980's in his position as a Government Minister.

A basket of vibrant flowers adorns a grave in Funafuti. Colour is a constant and rich aspect of life in Tuvalu, as decorations abound and locals proudly wear bright sarongs and frangipanis in their hair.





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As it is throughout the world, the people of Tuvalu want nothing more than a happy and secure future for their children. They deserve help from the international community to ensure that future generations can continue to live comfortably within the rich and unique Tuvaluan culture.



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