
Imaginative Geographies of Climate Change Induced Displacements and Migrations: A Case Study of Tuvalu

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Abstract: *Since climate change is both about physicality (physical transformations) and the ideational (various ideas, understandings and representations), it is more revealing and enlightening to focus on the interplay between the two. Taking Tuvalu, a small Island country in the Pacific with 10,509 inhabitants as my case study, and against the backdrop of highly alarmist geopolitical discourses about climate change in the small islands of the Pacific. I make the following argument in this paper. The so-called ‘endangered nation’ of Tuvalu is a revealing example of how displacements and migrations are likely to be caused (rather forced) more due to the government policy responses anchored in the imagined geographies of fear i.e. in anticipation of climate change consequences) than by material transformations in the environment per-se. Through a critical engagement with the official discourses, scholarly articles and media reporting, I further argue and illustrate that the discourse of climate displacements and relocations has a far more complex geography to it than normally acknowledged.*

Introduction

In the month of August 2014, Tuvaluan Prime Minister Enele Sopoaga in a statement to the Australian Broadcasting Corporation linked the impact of climate change on Pacific island nations to "a weapon of mass destruction" and further stated that-

"We are caught in the middle, effectively, in Tuvalu. We are very, very worried... We are already suffering. It's already like a weapon of mass destruction and the indications are all there... we only need to garner strong collective leadership to address this" (Bankok Post, 2014).

The tone and the tenor of his narrative of climate change are visibly marked by the geopolitics of fear and cartographic anxieties. The quotation above raises a number of intricate and intriguing questions and forces us to rethink about the power-knowledge nexus. Are these discourses becoming more powerful than the real problem of climate change? It draws upon into various alarmist imaginative geographies of climate induced migration.

Critically approached and analyzed, Klaus Dodds (2014:29) in his book entitled, *Global Geopolitics: A Critical Introduction* attempted to define **geopolitics as a discourse that is concerned with the relationship between power-knowledge and social and political relations**. According to Derek Gregory (2004: 17) 'We might think of imaginative geographies as fabrications, a word that usefully combines "something fictionalized" and "something made real," because they are imaginations given substance.' Imaginative geographies at the same time imply, 'Representations of other places, of peoples and landscapes, cultures and "natures" that articulate the desires, fantasies and fears of their authors and the grids of power between them and their "others"' (Gregory, 2009: 369).

Small islands remain highly vulnerable to global warming; their size and location make them the potential victims of rising sea level. According to the IPCC (2014) "Annual average air and sea surface temperature are projected to continue to increase in all tropical Pacific countries. By 2055, under the high A2 emissions scenario, the increase is projected to be 1°C to 2°C." (WG1, IPCC, 2014: 1276) Whereas these small islands are often used as the 'reference points' to global warming, when it comes to 'representing' them in the international climate change diplomatic negotiations and related discourses, their voices and priorities remain marginalized by and large. They are used more as 'justifying points' for

proving or denying global warming. This paper focuses on the Pacific island of Tuvalu and argues that the western, (earth-climate-science driven) dominated discourse of climate change not only deploys certain imaginative geographies, it further attempts to convert them into ‘realities’. One noteworthy example is the discourse of climate change induced migrations which in the end becomes a policy response rather than the result from any physical changes in the climate.

Situated in the Western Pacific, formerly known as the Ellice Islands, Tuvalu is 2,500 kilometres northeast of Australia. There are three reef islands; Nanumanga, Niutao, and Niulakita and six true atolls; Nanumea, Nui, Vaitupu, Nukufetau, Funafuti (the capital) and Nukulaelae in Tuvalu. It is a very low lying land; the highest elevation point is Niulakita that is 4.6 metres above sea level. The people of Tuvalu are originally Polynesian, who came 3000 years ago from Tonga and Samoa. During pre-European-contact times there was frequent canoe travelling around between the nearer islands. These people were inhabited from the eight of the nine islands of Tuvalu, thus the name, Tuvalu, means "eight standing together" in Tuvaluan. Living on the island is not easy and life is often harsh. The Tuvalu Island does not have any running water in the form of rivers and dependence on rain water is critical. “Tuvaluan people have a special relation with nature. Living in harmony with the nature that surrounds them, they use less and need less than those from industrialized nations. To them, family is the most important thing in their lives. These things are just a few of the enchanting features of Tuvalu” (NPO 2011). The key source of income is tuna fishing licences and the sale of postage stamps and foreign aid are the other major sources of revenue. Due to the low income, small size and less economic and natural resources, the United Nations has designated Tuvalu as a ‘least developed country’. With the climate change “Tuvalu is vulnerable to both economic and environmental shocks and change, largely because of its small size, remote location, limited natural resources and low gross domestic product (GDP)” (Prideaux and McNamara, 2013:583).

1. Climate Change and Tuvalu

Climate change has become a metanarrative in which the small island states like Tuvalu, despite their overall marginality in international relations, have come to occupy a central place (Farbotko2005). As one analyst puts it so aptly, “Journalistic, scientific and environmentalist quests for certainty and truth about rising sea levels find spatial expression in Tuvalu. On the one hand, Tuvalu is often viewed as a site of compassion and environmentalist action in response to climate change, embodied in calls for protection of climate refugees” (Farbotko 2010).

Such alarming predictions tend to raise a whole range of questions regarding the future of small islands like Tuvalu. For example, how far these small islands with extremely low capacity going to mitigate climate change and adapt to its adverse consequences? Most of the small islands on the globe are not more than 3 to 4 meters above the mean sea level at the highest point. In Tuvalu the highest land point is near about 3 meters. It is least surprising therefore that IPCC has concluded that sea level rise poses the greatest threat to small islands, both socially and economically (ibid). No doubt Tuvalu has been facing extreme weather events and floods since long. But the link between these floods, climate change and sea level has intensified over the years. “The adaptive capacity of many Tuvaluans is already exceeded with storm surges and king tides. With the possibility of sea level rise of one meter this century, even if the surface area is not completely submerged, the question arises how long people there can remain and lead normal lives” (Warner 2009). In Tuvalu we can find out the most visible effects of climate change. In the past few years flooding has increased, and apart from sea level rise, Tuvalu is also at risk of cyclones, tsunamis, house fires, drought, and flooding due to high tides and storm surges. According to certain studies, “fifty hectares of Tuvalu disappeared into the sea during the 1997 storms. The tiny country's precious 10 square miles of land were starting to disappear” (Lusama 2003).According to former Prime Minister Koloa Talake of Tuvalu, "Flooding is already coming right into the middle of the islands, destroying food crops and trees, which were there when I was born 60 years ago. These things are gone" (Field 2002). Available scientific data show that climate change is leaving its worst impacts in terms of sea level rise, and coral reef, regarded as the most important resource of small islands is under

enormous threat. Scientists are telling us that 58 percent of the existing sum of living coral reef, about 2,55,000 to 1,500,000 kilo meters, is under great threat from both human and non-human activities. The reef growth rate in Tuvalu is slow and this rate will not be able to tolerate the projected sea level rise and increasing surface temperature.

1.1 Rising sea level and Tuvalu

As stated, earlier Tuvalu is a low-lying island country. Geologically, Tuvalu is a low-lying land, not fully developed and infertile. "Sea-level rise is naturally a major concern for the Tuvaluan population, and some have already started building small dikes to protect their houses. Actual measurements of sea-level rise, however, are surprisingly scarce, and people tend to rely on their own observations and anecdotal evidence to find proof of the rise" (Shen and Gemenne 2009: 8). Thus Tuvalu is already experiencing the land erosion due to both natural and anthropogenic factors; the sea level rise is further accelerating this process. The island nation already has lost in recent years alone one meter of land around its largest atoll (ACF new source 2001). The already less fertile soil of Tuvalu is becoming more and more infertile, as the rising sea level floods the water in the fields. This intrusion of saltwater due to sea level rise exacerbates stress to agriculture.

1.2 Health Implications of Climate Change

With 'medium confidence', the Fourth Assessment Report of IPCC 2007 has identified the growing concern of climate change on health. The small island of Tuvalu, located at tropical and sub-tropical zones have a weather which is already conducive to many diseases like malaria, dengue, filariasis, and food- and waterborne diseases will become more dangerous. Tuvalu is witnessing the increasing number of filariasis cases and food and waterborne diseases. According to Tuvalu government, "This is due to limited land for subsistence agriculture and the increased purchasing power of the employed population. As a result, an increase in lifestyle diseases has occurred" (UNFCCC 1999: 22).

1.3 Agriculture and Food Security

Agricultural production is very important for economic, societal and dietary welfare of Tuvaluan people. Near about 80 percent of the population participates in agricultural and fishing works. According to the UNFCCC (1999) the entire population relies on the ocean's natural resources, as its primary source of protein. The recent scientific findings suggest that climate change, newly established commercial fishing, and overexploitation has already had endangered all these resources. Crop productivity and biodiversity has come under serious threat by increasing temperature and carbon dioxide. Rising sea level is also putting a great threat to food security as it is leading to salinization of the soil and ground water. It is also threatening the scarce fresh water resources on the island

2. Debating Climate Change Migration

The climate change scenarios by different scientific and non-scientific agencies have consciously or unconsciously created an environment of fear. It's in the context of such alarmist geographies that Tuvalu has been portrayed as "the poster child" for climate change debate (Pacific Media Assistance Scheme, 2013; Patona and Dunlop 2010). Tuvalu is widely cited as the beginning point in the process of fear driven climate change migration (Doyle and Chaturvedi 2010), where a small population of the country is likely to be forced to leave their native place within next 50-100 years. Thus, it has been often projected as the most vulnerable to both climate change and climate induced migration. According to François Gemenne (2011) "Tuvalu is expected to become uninhabitable by 2050, and its leaders are actively seeking solutions for the future. Despite the desire of the Tuvaluans to stay on the islands, and the fear that their cultural heritage might be lost, relocation seems to be the most realistic option. But no solution seems to be definitive at the moment." But migration has always remained one main adaptive strategy for the communities inhabiting the Pacific Island countries. What the alarmist accounts of climate change displacements and migrations is doing to alter the regular practice into the alarming trends. Many Pacific island societies, have historically proved their resilience against natural disasters, According to Barnett and Adger (2003: 328), "the key parameters of this resilience include: traditional

knowledge, institutions and technologies; opportunities for migration and subsequent remittances; land tenure regimes; the subsistence economy; and linkages between formal state and customary decision-making processes.” What is often not captured by the dominant discourses on climate change is that the international migration is not the only way of migration in the region but the internal migration too plays an important role in Tuvalu. Migration from outer island to the inner island of Funafuti is continually growing. To curb this migration, Tuvaluan government is developing infrastructure in outer islands as well. The international migration includes Tuvaluan people in Fiji, Australia, United States and New Zealand. Fiji has always remained the educational hub for Tuvaluan students accompanied with their families. A fund in international and regional organizations, such as, the local offices of UNDP or SOPAC also attracts Tuvaluan to Fiji. New Zealand is the favourite destination for Tuvaluan migrants. ‘It is common for Tuvaluans to apply through ‘family’’ or ‘‘international-humanitarian’’ migration streams. The ‘‘international humanitarian’’ scheme grants up to 75 Tuvaluans per year for permanent residency in New Zealand.’ (Shen and Gemenne 2009: 232). Although there is no clear definition of the term, climate migration has become one the most studied aspects of climate change. ‘The Pacific Islands and Tuvalu in particular, are widely understood to be places from which people are and will increasingly be forced to move’ (Mortreux, Barnett 2010). Although Tuvaluans, as pointed earlier, have used migration as a strategy of social, economic (family reunions as employment) adaptation in the past, the climate change driven academic and official discourse of different countries are now attributing the process of migration increasingly to the consequences of climate change.

Media too has also widely referred Tuvalu as the major victim of climate change which will eventually become a refugee country. In 2001 *The Sydney Morning Herald* an Australian newspaper published more than 21 news stories which talked about climate change migration from Tuvalu and presented Tuvalu as the site where climate change was heading towards inevitable forced migration. Tuvalu has been framed as

‘disappearing’, ‘drowning’ and ‘sinking’, and resulting in forced migration (Chambers and Chambers 2007). Many films and documentary have been made on the topic of climate change which presents Tuvalu as the foremost site of climate change migration. Not only the media, but the governments of Tuvalu and outside are also falling into the same trap of the alarmist geography of climate migration. “Early in the UN Framework Convention on Climate Change process the Tuvaluan Government sought to raise awareness about the risks of climate change by talking about the possibility of island abandonment during Conferences of Parties” (Mortreux, Barnett 2010). But as compared to government pronouncements regarding climate change, media responses are more dramatic and alarmist. According to Mortreux and Barnett, non-governmental organization are also trying to create public awareness about the risk of climate change and also presenting the issue of climate migration in more sensational terms. Brown (2001) has noted that:

As sea level has risen, Tuvalu has experienced lowland flooding. Saltwater intrusion is adversely affecting its drinking water and food production. Coastal erosion is eating away at the nine islands that make up the country. Tuvalu is the first country where people are trying to evacuate because of rising seas, but it almost certainly will not be the last. It is seeking a home for 11,000 people, but what about the 3,11,000 who may be forced to leave the Maldives? Or the millions of others living in low-lying countries that may soon join the flow of climate refugees? Who will accept them?...Where will these climate refugees go? (Brown 2001).

Tuvalu’s Prime Minister and the Minister for Foreign Affairs, Maatia Toafa, at the Mauritius meeting on the Small Island Developing States that took place in January 2013 said, “Tuvalu is already suffering from the impacts of climate change and sea level rise, and we are uncertain of the future of our atoll nation.” In 2002 Tuvaluan delegation to Johannesburg stated “Tuvalu is deeply affected by environmental change. The proceeding warming of the earth’s atmosphere and ocean forces many Tuvaluans to emigrate. As a state which contributed actively to the United Nations Framework Convention on Climate Change and the Kyoto Protocol,

Tuvalu strongly emphasizes that disregarding the goals and demands laid down therein seriously threaten Tuvalu's future existence." Such statements evoke fear, although there are little evidences of people migrating only due to climate change. Having said that, this discourse is very powerful and alarming. Tuvalu's government is considering the idea of buying some land from Australia or New Zealand, or a desert island in the area. Although both among the people and government there is a widespread acknowledgement of climate change as a threat, people do have a deep sense of attachment to their homeland, and feel that they will never leave the island even in the worst condition. They are very scared of climate change, yet they don't want to leave their country. Many are also denying the rhetoric of climate change as they feel it is a discourse coming from industrialized countries: "we didn't have any problem before people like you came and started talking about climate change... Now the people are leaving for New Zealand because of you." (A respondent quoted in Shen and Gemenne 2009:233).

It is assumed that changes in environmental condition and landscapes might have affected the ways that Tuvaluans support themselves and families. However, many studies based on fieldwork in Tuvalu have a different story to tell. Shen and Gemenne in their study 'Contrasted Views on Environmental Change and Migration: the Case of Tuvaluan Migration to New Zealand' has concluded:

The findings suggested that hardly any of the Tuvaluan respondents' livelihoods were directly affected by climate change. In contrast to other environmentally driven migration scenarios in other world regions, Tuvalu presents a unique case that the impact of environmental change has not affected the migration decisions because of the impacts on their livelihoods or making their living, as Tuvaluans' primary source of income and employment is rarely based on environmental or natural resources, such as agriculture and farming or husbandry. However, climate change has impacted Tuvaluans indirectly through the living conditions and the resulted psychological effects as in fears, feelings or migration motivations in response to climate change and sea level rise (ibid 2009: 244).

These findings suggest that there is a clear mismatch between the reality and rhetoric of climate change. The whole discourse is derived by the geopolitics of fear, where people firstly frame the imagined threat, and then they try to convert these imaginations into realities. The people of Tuvalu are being projected as climate refugees. The technical anomaly in climate change migration discourse is the use of the term; most of the time 'climate migrants' and 'climate refugee' are used as synonyms. It should be remembered that people who are at risk of climate displacement cannot be called refugees. When the term refugee is used, it has a legal connotation attached to it. According to international laws, a refugee is one who has well-founded fear of persecution on account of their race, religion, nationality, political opinion or member of a particular social group, who is outside their country of origin and whose government is unable or unwilling to protect them. The discourse of climate refugee is reducing the identity of Tuvaluan people they are being projected as vulnerable and helpless people.

Evoking both the fear of submerging and the hope of being rescued, the government of Tuvalu is also falling into the same line of alarmist geography of climate change. The government of Tuvalu, in 2000, appealed to both Australia and New Zealand to grant shelter and care to Tuvaluan people in case the rising sea levels reached the point where evacuation would be essential. This appeal was the result of fear inducing discourses of climate change. The Australian government refused Tuvalu's request on the ground that accepting environmental refugees from Tuvalu would be "discriminatory". But the New Zealand government, under the strict visa norms, established an immigration program called the Pacific Access Category (PAC) which allows selected migrants from Fiji, Tonga, Kiribati and Tuvalu. The media framed the agreement as if it was exclusively for climate refugee, whereas the New Zealand Ministry of Foreign Affairs and Trade asserted, "There is no link between the PAC quota and climate change" (Shen 2007: 19). According to David Corlett, "There is no evidence that Pacific islanders are "evacuating" to New Zealand. Nor has there been a mass exodus from low-lying Pacific Islands due to climate change. There is, and always has been, a lot of movement around the Pacific, including to New Zealand."

The problem comes when the term climate refugee is used in an abstract form; we cannot say that it is an independent category, which will eventually result into migration. These claims are yet to become reality. Migration is too complex issue to be categorised only as environmental or climate induced migration, “socio-economic pressures resulting from lack of employment and development opportunities as well as other kinds of environmental changes are the main drivers of out-migration. The role of climate change needs to be viewed together with these processes” [of climate migration] (Harthman 2010).

Another issue which relates to the term of climate refugee is the growing tendency of securitization of the term. Different state and non-state agencies are framing the issue as a security threat. Climate refugees are being seen as the ‘carriers of crises’. In 2007, United States based Centre for the Naval Analysis Report (CNA) has been widely cited as the clear example of securitization of climate refugee. This securitization takes the issue away from the low politics of discourse and negotiations to high politics of military responses, and makes it an issue of emergency. This debate is “raising the spectre of climate refugees and climate conflict obscures the real battle lines in the climate policy arena.” (Hartmann 2010). The climate change discourse should be seen as a positive development which will help and inspire to create alternative ways of development. As Harthman had argued, ‘we do not need military to fight these battles. Instead, they should take place in public, democratic, civilian spaces at all levels of politics and governance. Those who continue playing the climate refugee and conflict card are raising the stakes unnecessarily and threatening to militarise not only climate policy, but also development aid.’ (Harthman 2010: 242).

3. Conclusion

After investigation of competing fear-inducing imaginative geographies of climate change at various sites, and the manner in which Tuvalu is being implicated in them, reinforces Gregory’s insightful observation that,

‘imaginative geographies are spaces of constructed (in) visibility and it is this partiality that implicates them in the play of power’ (Gregory, 2009: 371). The construction of Tuvalu as a ‘black hole’ in climate change discourse is the classic example of imaginative geography. The dominant discourses of climate change, present the islands as poor in natural resources and offering few opportunities for development. Tuvaluan case shows how highly alarmist geopolitical discourses of climate change frame the Small Islands States of the Pacific as passive victims. The inhabitants of these islands, as Carol Farbotko (2010) puts it succinctly, “long marginalized, are denied their own agency in the climate change crisis. They are fictionalized into victim populations fleeing inundation, desperate for dry land, even drowned.” The government of Tuvalu too has certain interests to promote through climate change discourse. It can use climate change as a means of financing development, leveraging aid and influencing migration outcomes by emphasizing Tuvalu’s victimhood. The complex issue of climate change induced displacement and migration demands a more detailed account and analysis, which in turn would need field based studies. The so called ‘Scientific Models’ used to predict the impacts of climate change leave much to be desired. Instead of always talking about the so called climate migration, the discourse should be focused more on the right of Tuvaluan to live in their homeland, should be given more voice - this means that there needs a greater effort in the implementation of the adaptation program in the island, which can help in sustaining their traditional lifestyle and migration should not be regarded as the only or as most important option for adaptation.

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