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Climate Change in Oceania

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Climate change is having a real impact upon communities in the South Pacific (Oceania) through sea level rise and extreme sea level events, threatening forced migration and profound cultural impacts. A Western ecomissiology should focus on ecojustice, both in terms of adaptation in caring for those impacted and of mitigation via speaking ecoprophetically to Western power structures. Indigenous ecotheologies like Theomoana will help contextualise ecotheology as cultures adjust to life in a changing world.



Impacts of climate change are already being felt in South Pacific communities. Rising sea level contributes to coastal erosion, causing atolls to be abandoned, damage to crops due to increasing salinity, and loss of fresh water. Oceania cultures are among the first to be challenged by the need to migrate.

Culture is tied to place. People with a high level of place attachment can show distress at the prospect of moving. Hence, climate change narratives can interact with narratives of cultural decline. Some fail to understand that it is not God's wrath upon them, but the consequence of human behaviour and injustice that is responsible for the changes they observe. Other theological responses to climate change tend towards denial.

Ecotheology is the theological reflection on the creation – God’s providential care, its testament to God’s creative power and wisdom, our role and place in it, and its own internal working and interrelatedness.

Ecomissiology sees mission in terms of reconciliation at all levels since God is involved with the whole of creation. Ecomissiology is also a matter of ecojustice, since it is the global poor who face the worst effects of environmental degradation. It is not sufficient to tend to the wounds of those hurt by climate change, when the present economic system is a major contributor to it.

Oceania churches have been involved in developing Theomoana, an Oceanic way of doing theology, in response to some islands facing extinction due to climate change. Theomoana is contextual, coming from *theo* for God and *moana*, the Polynesian word for ocean. It is tied to a profound hope in the God who made the oceans and cares for us and for creation.

In response to climate change in Oceania, the missional community should make ecomission a larger part of mission. Missionary training could include basic environmental science specific to mission fields, ecomissiological theory, and ecopraxis. In Oceania, this will involve developing Theomoana, which will enable islanders to adapt to loss of place and associated cultural dislocation.

Mission agencies should aim to reduce their own ecological footprint, since it is our lifestyle that contributes to impacts being experienced now and into the future. This will include reduction in travel where telecommuting and teleconferencing will suffice. They should be involved both in activities that allow communities to remain in their own locations as long as possible and in lobbying governments for migration programs and better treatment of asylum seekers.

While many of these points appear to move from a traditional missional focus of proclaiming the gospel, they in fact take seriously the Kingdom of God in its emphasis on peace, justice, and reconciliation of all things.

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(Oceania) through sea level rise and extreme sea level events, threatening forced migration and profound cultural impacts.

Ecomissiology needs to be developed from two perspectives:

- A Western ecomissiology should focus on ecojustice, both in terms of adaptation in caring for those impacted and of mitigation via speaking ecoprophetically to Western power structures.
- Indigenous ecotheologies like Theomoana will help contextualise ecotheology as cultures adjust to life in a changing world.

Climate of the southwest Pacific

The Walker Circulation is an important atmospheric circulation that controls climate in the Pacific. Winds blow across the equatorial Pacific from east to west, piling up waters in the west in a region known as the West Pacific Warm Pool. The large supply of heat and moisture means that this region experiences considerable rainfall.

The Walker Circulation varies due to the El Niño-Southern Oscillation (ENSO), with weaker winds and drier conditions in the Western Pacific during El Niño years and stronger winds and wetter conditions during La Niña years. Over longer timescales, Pacific climate varies in an ENSO-like way due to the Interdecadal Pacific Oscillation.¹

Extreme sea levels pose a regular threat to Oceania communities. They are produced by a combination of tides, seasonal or longer-term fluctuations such as ENSO, and shorter-term fluctuations such as storm surges and ocean waves. Tropical cyclones produce short-term and localised storm surges, and long-distance travelling ocean waves. Impacts of these waves depend upon local conditions. Atolls with steep shelf margins are particularly vulnerable.

A changing climate

The Fifth Assessment Report (AR5) of the Intergovernmental Panel on Climate Change (IPCC) has shown that warming of the climate is unequivocal and that each of the last three decades has been warmer than the last:²

- This coincides with an increase in atmospheric carbon dioxide of 40% since pre-industrial times.
- Global Circulation Models show that the observed global average temperature increase during the 20th and 21st centuries is mostly due to increases in greenhouse gases.
- Likewise, ocean heat content in the South Pacific, the key control of surface temperatures, has also increased due to greenhouse gases.³

Global average sea level has risen 19 cm since 1900:

- It is likely that there has been an increased incidence in and magnitude of extreme sea level events.
- There is low confidence that tropical cyclones have increased in intensity, with no increase during the period 1981-2007.
- Surface temperatures have warmed between 0.08 and 0.2°C per decade across the Pacific.
- There has also been an increase in ocean acidity, which affects marine life, particularly species of coral, and hence coral ecosystems.
- Climate change may also be responsible for changes in ENSO.

Pacific impacts

Impacts are already being felt in South Pacific communities:

- The rising sea level contributes to coastal erosion, causing atolls in Tuvalu to be abandoned.⁴ Saltwater intrusion through porous coral has affected taro crops.⁵
- In the low-lying coastal areas of Fiji, recent sugar cane crops have been poor due to increasingly saline conditions.⁶

The main island of the Carteret Islands, part of Papua New Guinea (PNG), home to more than 1,500 people, was completely inundated in 2008.⁷ Still bodies of water leftover were responsible for malarial outbreaks.⁸ In 2007, the Carteret islanders decided to initiate a migration program to mainland PNG, although progress has been slow.

Loss of fresh water due to sea level rise and intrusion of saltwater are the most serious climate-related risks in countries like Kiribati.

Asian cities

Global sea level is expected to rise by 50 to 100 cm by the end of the 21st century, according to the IPCC. However, there is a lack of complete understanding of the role of Antarctic ice sheets in sea level rise. Some semi-empirical model projections suggest up to double the projected rise.

There are many other developed and developing nations where large numbers of people are threatened by sea level rise. The figure shows a selection of cities in the Asia-Pacific region that are threatened, from a study by Hanson et al.⁹ [*Editor's note: Click on image next to article title for enlarged view of figure*]

Cultural impacts and responses

It is clear that migration will be a key strategy of climate change adaptation.¹⁰ As well as depriving people of access to key resources, climate change impacts cultures because culture is closely tied to place. Although few if any cultures will escape the impacts of climate change, Oceania cultures are among the first to be challenged by the need to migrate, as the Carteret Islands example shows.

Culture is tied to place by the level of attachment to that place, the identity constructed around a settlement or village, and the sense of belonging to that community. People with a high level of place attachment can show distress at the prospect of moving, as appears to be the case in the slow progress in migration from the Carteret Islands. It is also in evidence in the attitude of many Tuvaluans, as illustrated in the following:

'Moving away from Tuvalu is not good for our culture and values. We want to live in our own land, our home, and where our forefathers have lived. Tuvaluan people don't like to be called refugees.'

'We don't want to leave this place . . . it's our land, our God-given land, it is our culture, we can't leave. People won't leave until the very last minute.'¹¹

Hence, climate change narratives can interact with pre-existing narratives within cultures to produce responses which may not appear 'rational'. In Oceania this can include the merging of climate change narratives with those of cultural

decline. Tafue Lusama, general secretary of Tuvalu's national church, says:

'We plant and depend on God to provide fruits. We go out fishing with faith that God will provide enough daily. The failure of these seems to indicate to the people that God's providence has failed them.'

Some Tuvaluans fail to understand that it is not God's wrath upon them, but the consequence of human behaviour and injustice that is responsible for the changes they observe. Instead, like ancient Israel, they see a direct link between their relationship with God and blessing and cursing.¹²

Other theological responses to climate change tend towards denial. Journalist Mark Lynas interviewed Tuvaluans on their attitude to climate change.¹³ Two schoolgirls insisted that they did not believe in climate change: 'No. We're Christians. God will protect the island'. One man proclaimed: 'Only the Creator can flood the world . . . I believe in God – I don't believe in scientists'.

Developing an ecotheology and ecomissiology

Ecotheology is the theological reflection on the creation – God's providential care, its testament to God's creative power and wisdom, our role and place in it, and its own internal working and interrelatedness.

Ecomissiology sees mission in terms of reconciliation at all levels:

- The gospel is broader than 'me and Jesus' because God is involved with the whole of creation, not just human beings.
- Ecomissiology is concerned for creation because God saves us with, and not from, creation.
- Ecomissiology is also a matter of ecojustice, since it is the global poor who face the worst effects of environmental degradation.
- It includes ecospirituality, which represents a new way of seeing creation, because it views caring for creation in its own right as a form of mission.¹⁴

A robust ecomissiology needs to be developed to address the concerns of Oceania communities threatened with relocation. In particular, this should be an indigenous movement. Rev Dr Cliff Bird of the Pacific Theological College has noted that Oceania cultures use terms such as 'guard, care for, look after,

share, and use wisely' when discussing the management of shared resources. These concepts are 'the foundations for rules or norms that embody the concept of stewardship of the home, and the goal is for the good of all'.¹⁵

Otin Taai

Oceania churches have been involved in developing such a theological framework. The Otin Taai Declaration¹⁶ makes a number of theological statements and recommendations:

- Pastors should 'equip themselves with an ecotheology to fully understand the relationship of God, nature, and the people'.
- This includes the recognition that the Noahic Covenant does not deny that human beings are causing sea level rise. Climate change is not an 'act of God' but 'is a result of human economic and consumer activities'.
- They call for 'our brothers and sisters in Christ throughout the world to act in solidarity with us to reduce the causes of human-induced climate change'.

It is a matter of ecojustice for Western churches to realise in the context of the parable of the good Samaritan that it is not sufficient to tend to the wounds of those hurt by climate change, when the present economic system is a major contributor to climate change, just as Roman taxation was a major cause of first-century banditry via land dispossession.

Theomoana

From the indigenous perspective, Otin Taai recognises that the 'biblical understanding of the wholeness and inter-relatedness of all creation has some similarities to the traditional Pacific teachings about the land known as Vanua/Fonua/Whenua/Enua and the ocean referred to as Moana'.

Winston Halapua has developed what he calls Theomoana, an Oceanic way of doing theology in order to provide a vision of prophetic leadership.¹⁷

This theology was developed in response to some islands facing extinction due to climate change. Theomoana is contextual, coming from *theo* for God and *moana*, the Polynesian word for ocean. Moana as a 'window into a worldview is about depth and mystery' and a pathway to eternity. It expresses

decolonialisation, since 'Pacific' was 'coined by outsiders and is synonymous with scattered small islands, helplessness, isolation, and dependence'. Hence the use of the term Oceania throughout this essay. Theomoana is also tied to a 'profound hope in the God who made the oceans . . . God cares for us and for creation'.

Halapua sees ideas of ecotheology and ecojustice as largely landlocked ideas. Hence Theomoana is a more relevant theology for Oceania. Nevertheless, both are expressions of the sacredness of creation.

Ecomissiological implications

In response to climate change in Oceania, the missional community should place a great emphasis on ecomission:

- This will involve making ecomission in proclamation and praxis a larger part of mission. Missionary training could include basic environmental science specific to mission fields, ecomissiological theory, and ecopraxis such as permaculture.
- In Oceania, this proclamation will involve developing Theomoana, which will enable islanders to adapt to loss of place and associated cultural dislocation.
- A focus on kingdom values of peace and (eco)justice will mean that mission agencies should aim to reduce their own ecological footprint, since it is our lifestyle that contributes to impacts being experienced now and into the future. This will include reduction in travel where telecommuting and teleconferencing will suffice, various energy saving mechanisms, and ensuring that all investments are divested of coal.
- Mission agencies should become involved with aid and development agencies (such as TEAR Fund) in lobbying governments to move to reduce greenhouse gases.
- While we hope that the worst impacts of climate change will be avoided, many communities will be disrupted and some will have to move. Mission agencies should be involved both in activities that allow communities to remain in their own locations as long as possible and in lobbying governments for migration programs and better treatment of asylum seekers.

While many of these points appear to move from a traditional missional focus of proclaiming the gospel, they in fact take seriously the kingdom of God in its emphasis on peace, justice, and reconciliation of all things.

Endnotes

¹ Climate Change in the Pacific: Scientific Assessment and New Research. Volume 1: Regional Overview.

² IPCC, 2013: Summary for Policymakers. In: Climate Change 2013: The Physical Science Basis. Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change [Stocker, T. F., D. Qin, G. K. Plattner, M. Tignor, S. K. Allen, J. Boschung, A. Nauels, Y. Xia, V. Bex, and P.M. Midgley (eds.)]. Cambridge University Press, Cambridge, United Kingdom, and New York, NY.

³ IPCC, 2013: Technical Summary. In: Climate Change 2013.

⁴ Moore, C. A., 'Awash in a rising sea—How global warming is overwhelming the islands of the tropical Pacific', International Wildfire, Jan-Feb 2002.

⁵ Tuvalu's National Adaptation Programme of Action, Ministry of Natural Resources, Environment, Agriculture and Lands. Department of Environment. May 2007. unfccc.int/resource/docs/napa/tuv01.pdf. Last accessed 11 November 2013.

⁶ UNDP report.

⁷ Julie Edwards, The Carteret Islands: First man-made climate change evacuees still await resettlement. Pacific Conference of Churches, November 2010. <http://www.pcc.org.fj/docs/Julias%20Cartaret.pdf>. Last assessed 11 November 2013.

⁸ United Nations University. Local solutions on a sinking paradise, Carteret Islands, Papua New Guinea. <http://vimeo.com/4177527>. Last accessed 11 November 2013.

⁹ Susan Hanson et al. 2011: A global ranking of port cities with high exposure to climate extremes. *Climatic Change*, 104, 89-111.

¹⁰ W. Neil Adger, Jon Barnett, Katrina Brown, Nadine Marshall, and Karen

O'Brien. 2012: Cultural dimensions of climate change impacts and adaptation. *Nature Climate Change*, 3, 112-117.

¹¹ Friends of the Earth International, *Climate Change: Voices from Communities Affected by Climate Change*, Amsterdam: Friends of the Earth, 2007.

¹² Ruth Moon, Teaching Natural Theology as Climate Changes Drown a Way of Life. Posted 14 February 2012.

<http://www.christianitytoday.com/ct/2012/february/natural-theology-climate-change.html>. Last accessed 11 November 2013.

¹³ Lynas, M, *High Tide: News from a Warming Planet*. Flamingo, London, 2004.

¹⁴ Mick Pope, Preaching to the Birds? The Mission of the Church to the Creation, in Michael Frost (ed.), *Speaking of Mission Volume 2* (Sydney: Morling Press, 2013).

¹⁵ Pacific churches must pay attention to threat of Climate Change, *Islands Business*, 8 March 2013. <http://www.islandsbusiness.com/news/solomon-islands/556/pacific-churches-must-pay-attention-to-threat-of-c/>. Last assessed 12 November 2013.

¹⁶ The Otin Taai Declaration: The Pacific Churches Statement on Climate Change, 6-11 March 2004.

<http://www.pcc.org.fj/docs/The%20Otin%20Taai%20Declaration.pdf>. Last accessed 12 November 2013.

¹⁷ Winston Halapua, Oceans as a tool in theology: Moana Methodology, National Religious Coalition on Creation Care.

<http://www.nrccc.org/site/Topics/Issues/Oceans/MoanaMethodology.html>. Last accessed 12 November 2013.