Thirsting for justice

Tanya Jones laments the loss of glaciers in the high Andes



Mining settlement under the Cordillera Apolobamba, near Pelechuco, Bolivia.

Photo credit: S. Cook

don't know what it's like to watch, over just a few years, your beloved and life-giving glaciers lose their ice.

Over the past months, I've attended a lot of online conferences. I've been moved and challenged by the opening words with which speakers from Australia, Canada and other settler colonial states have paid their respects to the Indigenous people from whose traditional lands they speak. I am writing this at home in Scotland, but feel a similar imperative to acknowledge the experience and knowledge of those

about whom I am writing. My understanding, from a distance of place, culture and privilege, mediated by books and articles, is partial in both senses, incomplete and skewed.

One thing I do know is that glacier recession is one of the clearest and most striking effects of climate change and another is that the tropical glaciers of the Andes are among the fastest shrinking in the world. In the High Andes of Peru, this deglaciation is exacerbating the difficulties faced by the largely Quechua-speaking inhabitants, people

already wounded by both historic and contemporary racism and structural injustice. Three particular harms that are being intensified are the risks of glacial lake outburst floods, vulnerability to water stress, and threats to community and identity.

As glaciers retreat, they leave behind them lakes filled with meltwater and dammed by combinations of rock, debris and ice. These lakes are vulnerable to many impacts, including earthquakes, landslides, icefalls and waves from higher lakes above them.

The resulting floods typically carry rock and debris, travelling at high speed down towards towns, villages, homes and farms. A glacial lake outburst flood which hit the small city of Huaraz in 1941 killed around 1800 people (some estimate many more). A current case in the German courts, brought by local farmer Saul Luciano Lliuya against power giant RWE, concerns the likelihood of its repetition, raised by climate-induced increases in the quantity and size of glacial lakes and the instability of mountain slopes.

Decisions about how to manage glacial lakes are made more difficult by the fact that they are not only dangerous flood risks but also vital water resources at a time of growing scarcity. During the early stages of deglaciation, the amount of meltwater increased, encouraging the commercial cultivation of thirsty export crops in coastal regions. The water to irrigate these comes from the Andes, though the Andean people see little or no benefit. But once "peak water" has passed, as it already has for many Peruvian glaciers, the quantity of meltwater rapidly diminishes, just when, with more extreme dry seasons, the depletion of groundwater and intrusion of saltwater, it is needed the most.

The domestic and subsistence farming needs of the Andean people rank very low in water priorities. behind agribusiness, hydroelectricity and, perhaps most of all, mining. Mineral extraction, in Peru as in its neighbouring countries, not only uses huge amounts of water, but often leaves them irremediably contaminated with lead, arsenic and other toxins. Communities that have centuries of experience in managing their water supplies safely and fairly, seek at least minimal participation in local decision-making, only to find themselves again and again the victims of greed and broken promises.

But glaciated mountains and glacial lakes are, for the people of the Andes, not mere resources, but living beings, foundational to the understanding of community and identity. Since the early days of Spanish colonization, these traditional beliefs and practices have adapted to assimilate Catholic doctrines and figures in ways that foreshadow the belated emergence of ecotheology in our minority world. Now, however, not only are harsher forms of evangelical Christianity condemning the relational respect and gratitude shown to non-human nature, but the lakes and mountains themselves seem to have become alienated from their human sisters and brothers. Meanwhile, as harvests fail, more and more of the younger generations are forced into exile to the cities, prey to exploitation and

My own research asks how restorative justice principles and practice, the healing of relationships, the sharing of stories and the work of transformative change could address climate injustices in places such as the Peruvian and Bolivian Andes. intersections environmental harm and underlying oppression. I had originally hoped to be spending time in one such community. before the poor of the world, and of Peru in particular, were further wounded by this new, yet overlapping crisis. For now I can only read, listen, reflect and pray.

The climate crisis, as well as being a crisis of justice, is crucially a water crisis. Not only are temperature rises most manifest in water events: too much, too little, too late, too fierce, but the greedy responses of the minority world are further exacerbating water injustice. The thirsty business of lithium mining in the salt flats of Bolivia, feeding the electric car frenzy, is just one example. Unless we take water, and the water needs of the poorest, seriously, our shiny net-zero targets will be nothing but a source of shame.

The prophets, psalmists, and Jesus of Nazareth all spoke frequently and passionately of water. We, perhaps especially on these temperate islands, spiritualize these references, making them all about the Spirit. They work as metaphors, of course, but also as representations of tangible, essential reality. For the people of the Biblical Middle East, there is no such thing as being so holy that you don't need to think about water. That is our privilege, and it is proving to be a brief one. Whatever Jesus meant by his words to the Samaritan woman (and David Bentley Hart notes that "living" also meant "flowing" when it came to water) she certainly understood it as real abundance. Equally, the storm which he calmed was a real one, not simply an image of divine protection.

The brilliant songwriter Bap Kennedy, who died too young not long ago, wrote a gentle, engaging song called *Mostly Water*, about how much energy we put into the wrong worries and conflicts. Maybe we too ought to remind ourselves, when we're tempted to overcomplicate or overdemand, that, like the Earth and the other living beings with which we share it, we too are mostly water. It is our most fundamental and universal shared necessity, our most precious and vulnerable physical treasure, and the very least that we owe to one another.



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