

Outback/Wilderness

For still the desert lies

My thirsting soul before

O Living waters, rise

Within me evermore.

John S.B. Monsell (1811-1875) Hymn 598 CPWI

The importance of rainforests in the world cannot be overstated. The many ways in which they contribute to the global climate and general stability suggest that it is essential to maintain a critical balance between maintenance of the rainforests and modern development. The Amazon Rainforest is a major store of about 2 billion tons of carbon. However, since 1970, about 17 to 20% of the Amazon has been lost to deforestation. That is about the size of Texas or Pakistan. While the change of use is understandable as large portions of the forest are being cleared for grazing of cattle and other agricultural purposes. However, as plausible as these initiatives may be, they are affecting the equilibrium of the Amazon. Scientists have suggested that if the area that is lost rises above 25%, it will reach that level of irreversible tipping point, and the results can be catastrophic. The direct consequences of excessive deforestation are:

- (i) Desertification.

This phenomenon is a distinct consequence of humanity's activity and abuse of forested areas. The 400 billion trees in the Amazon store about 2 billion metric tons of carbon. However, as a result of deforestation over the past few decades, the rainforest records a deficit in carbon storage.

The loss of trees has a deleterious effect on soils because without a stable root system, soils become loose, depleted of nutrients and easily wash away during flooding. In addition, the removal of trees disrupts the flow of flying rivers and can lead to reduced rainfall in some areas thus lead into crop failure. The flying

rivers of which we speak are like a relay system that runs across the Amazon rainforest.

It is said that one droplet of rain or water falls and evaporates about 5 to 6 times before it leaves the Amazon rainforest. So the flying rivers are not just a constant flow in the air, but it is a flow of condensation and evaporation, condensation and evaporation, which means that when trees or large areas of trees are cut out, it disrupts the flow of that quick condensation and evaporation. It is like dropping the baton in a relay race.

(ii) Aridification

When trees are destroyed and not replaced, it affects the carbon uptake. This leads to the thickening of the protective carbon shield, which protects the earth from the full force of short-wave sunrays as they come to us but allows the long wave rays to easily escape having reached the earth. The thickening of this protective shield results in the prevention of the weaker long wave sun rays to escape. The result is a rise in temperature, which leads to drying of soil at a much quicker rate and in some cases, a basic change in climate.

Reduced rainfall could mean a disruption in the global rainfall patterns. Humanity actually contributes to the formation of soil failure. Rising temperatures coupled with destruction of trees leading to savannification and desertification can be a catalyst for the wildfires which destroy the habitats of already distressed desert animals.

Everything is connected! The forest, the land, the outback/wilderness and the rivers all form a part of the generation and distribution of water.

The Amazon, as we learned, is the world's largest river by volume. It pumps millions of cubic meters of water into the Atlantic, which is then picked up by evaporation, caught up in atmospheric rivers which move inland and join the water released by the rainforest through transpiration forming the flying rivers of

the Amazon. The process loops creating a cycle which maintains life by providing living water.

It all begins with trees and nutrient rich soil as the prophet Ezekiel envisioned.

When trees are destroyed, it creates a problem in the distribution of water.

Everything falls apart if plant life is removed from the earth.

Reflection:

Holy scripture is replete with examples of wilderness encounters and desert conditions. They are spiritually arid places where persons wrestle with the conditions of their lives or the mission before them, as was the case with Jesus. What Holy scripture also attests, is that the wilderness can be a place of renewal and strengthening of resolve because though it may be dry, living water can be found there. The psalmist in Psalm 84 reminded us of this reality when he wrote:

Happy are the people whose strength is in you!

Whose hearts are set on the pilgrims' way.

Those who go through the desolate valley will find it a place of springs,

For the early rains have covered it with pools of water.

Psalm 84:4-5 BCP CPWI

This passage should serve as inspiration for us that all is not lost for our planet if Christians advocate and become champions for climate justice. We can turn the trend around converting places that are now parched because of the climate crisis into pools of water.

Likewise, we must be agents of hope for people who feel like Ezekiel's community felt, that all is lost, their bones are dried up. The Christian must be an agent of living water pointing persons to where true joy can be found, creating for them, pools of water in the desert of their lives.

Perhaps a good closing reflection would be on a hymn that describes a place where we have all been or may be experiencing at this point in our lives:

As the deer pants for the water,

So my soul longs after you.

You alone are my heart's desire

And I long to worship you.

You alone are my strength my shield,

To you alone may my spirit yield.

You alone are my heart's desire

And I long to worship you.

Martin Nystrom (1956-) Hymn 407 CPWI