"The role of Nature and the call of Spirit in combatting climate change"

Thanks for inviting me. I want to give you some reflections on where humanity is right now; the role of nature in combatting climate change; and – with great temerity given present company – some thoughts based on my reading of the Bible, and the Book of Isaiah in particular.

I've decided not to accompany my talk with a slide presentation but, if you're still awake, I'll show a few pictures at the half way stage to bring things to life.

My observations come from running a family farm in Leicestershire; and from trying to save the Amazon rainforest for the last 25 years. My thinking undoubtedly came into focus when I almost died from COVID. When my life was hanging by a thread, I was visited by the love of God.

I am blessed that my life has brought me into close contact with nature. And it has also given me direct experience of the divine.

When I first started thinking about this talk, I thought that I'd begin with the role of nature and then, in the second half, address the role of spirit. But the more I thought about it, the more powerfully it came to me that this is a false duality. The Creation, in its entirety, is a reflection of the Glory of God. The deeper into Nature you go, the closer to God you get. I myself got married not in a church, but in a wood. If we recognise that God is in every thing, every where – the birds of the air, the fish in the sea, the beasts in the field, the trees of the forest, the rivers, lakes, rocks and mountains – then the destruction of Nature is a sin against God.

I have come to believe that over the centuries of European expansion, the church was co-opted into colonial ways of thinking. Indigenous cultures were denigrated to justify their domination, exploitation and extinction. By portraying indigenous thinking as "backward" and "pagan", Christianity asserted the superiority and the "civilising" mission of European powers; distanced Man from Nature; and promoted a sense of separation from the rest of Creation that has been disastrous.

A renewed awareness of the interconnectedness of all things - approaching the Natural World with reverence, awe and humility - is an essential pre-requisite

to our survival as a species. I was part of an initiative called "Religion, Science and Environment" under the inspiration of Patriarch Bartholomew, known as the "Green Patriarch"; we have A Rocha and their eco churches in the Anglican community, and it was wonderful to read the Papal Encyclical Laudate Si addressing the need to care for our common home.

I'd like to begin by setting the context. We are in a situation without precedent in human history. I'm sure that every generation thinks that the world is going to the dogs when they reach retirement age and look back on the world they once knew. At my stage in life, my great uncle Jim clearly thought that the world he loved was coming to an end. He built a bunker beside his house containing everything he needed to lead a civilised life – luckily for me, this included champagne; port; and delicious sardines!

But this time it is different. "Apres moi le deluge" takes on real meaning. Unless we mend our ways, the world we know will undoubtedly come to an end. Sooner rather than later.

I genuinely believe that this decade is vital. We're in the last chance saloon. In my lifetime alone, we have consumed 75% of the world's carbon budget. We have burnt fossil fuels in decades that the earth took millions of years to produce.

And we have now moved from an Age of Discovery to an Age of Consequences. There are signs that the ocean, which has been sequestering 30% of CO2 and 90% of the heat emitted by humanity, is saturated. The Amazon is no longer **APPROACHING** a tipping point, its **AT** a tipping point. The river is 4m below its normal level at this time of year and a state of emergency has been declared. Too much water in Pakistan, Libya and the UK....and not enough in the Amazon.

None of this is new. Indeed, we've just had CoP 28 in Dubai. The 28th time the world has come together to talk about it.

As early as 1972, the Stockholm Environment Conference initiated the debate between economic growth; the erosion of natural capital; and the wellbeing of people around the world. The issues have been on the table for over half a century and yet, in that time, humanity has been long on rhetoric and short on action.

We all know that glaciers are retreating; that corals are bleaching; that forests are burning and sea levels are rising. Fires in Brazil, Canada,

France and Greece are worse than they would have been because background temperatures are rising.

This collective failure is down to many factors – the power of fossil fuel lobbying; short termism and a lack of intergenerational responsibility; and the difficulty of persuading electorates to vote for change which might compromise their aspirations for a better life.

But we need to ask ourselves the fundamental question - "what **is** a better life?" Are human beings doomed to being no more than data points in the profit and loss accounts of multinational corporations? Or is there a higher calling?

Business as usual is going to end in tears. As Einstein famously said, "insanity is doing the same thing, over and over, and expecting different results".

I believe that a change in consciousness is required; and I believe it is already happening. There are many precedents for change on this scale – think of the abolition of slavery; the emancipation of women; the advent of democracy; the retreat from Empire; the change from Christianity being a persecuted underground movement to being the official religion of the Roman Empire; the Reformation......assumptions that seemed perfectly sound one day, were suddenly turned upside down the next.

There is nothing more wonderful than an English Spring. Here we are in bleak mid-winter, and yet we know that beneath the lawns outside snowdrops are on the move; daffodils are stirring; bluebells are thinking about coming to the surface. The transformative power of Nature is the greatest source of HOPE we have. Even the ecological catastrophe of Chernobyl can be turned into an opportunity for biodiversity to return - once Man has stepped aside.

When I survived Covid, I was lucky to return to the world in April – and I remember being blown away by contemplating a daisy. The simplicity of design is utterly perfect and breathtakingly beautiful.

We desperately need to change our relationship with the natural world. Just as an individual I took the beauty of a daisy for granted, so we as a species need to stop and reflect on the wonders of the world around us. The WWF's "Living Planet Index" reveals that the earth has lost 70% of its biodiversity in the last 50 years. As the human population has

exploded, non-human life has been crowded out. That is why the Anthropocene is also called the "6th Great Mass Extinction". That's why Global Canopy (which I chair) launched the TNFD (Taskforce for Nature related Financial Disclosure) to bring the biodiversity crisis into the boardroom and onto the balance sheet.

This is not just about climate. Its about life.

The rainforest is where the earth meets the heavens; where the biosphere meets the atmosphere. The forest is our best friend, a store of carbon, home to a bewildering array of biodiversity, and an ecosystem that produces "flying rivers" containing more moisture than the physical river itself.

And yet, driven by the insatiable appetite of the world economy for palm oil, soya and beef, we continue to lose the greatest carbon capture and storage service the world has ever seen.

Think of the amount of CO2 released when the rainforest burns; think of the permanent loss of that carbon sink; think of the loss of biodiversity; think of the loss of rainfall – and think of what it is like for indigenous people in the Amazon as smoke drifts through the trees and the cacophony of birds and frogs is drowned out by chainsaws.

In order to absorb the emissions driving climate change, Nature Based Solutions are very much in vogue. Nature Based Solutions can contribute approximately 30% of the climate mitigation needed under the Paris Agreement designed to limit temperature rise to 2 degrees, and ideally 1.5 degrees, this century.

Moving from an "extractive" model of managing the earth to a "restorative" one means a whole suite of actions – basically looking after the eco systems on which we all depend – be they forests, mangroves, peatland, hedgerows, oceans, rivers. All the components of the tapestry of life, of which we are **A** part. Not apart.

Brazil has been part of my life ever since I went there at the age of 18. Everything is big in Brazil – the problems, and the opportunities. I believe that what happens – or doesn't happen – in Brazil this decade will determine the future of human life on earth.

The foundation of Brasilia in 1960, was a deliberate attempt to occupy the interior of the country, where development had previously been concentrated on the coast. The ensuing assault on the forest is without precedent.

In the worst year, 1995, the Amazon lost 29,000 sq km. That is over 20,000 times the area of Hyde Park, or 248,000 the size of Wembley Stadium. Call it 1,000 Wembley stadiums every day of the week. Or 20 times the size of my farm in Leicestershire going up in smoke. Every day.

Things are better now than they were, with the last election in Brazil fought on the environment, the Amazon and the rights of indigenous people. Deforestation last year was around 30% lower than in 2022, but it was still around 5,000 sq km. As part of their Nationally Determined Contributions, Brazil has committed to restore 12 **million** hectares of forest by 2030. See what I mean – the problems and the opportunities are both enormous!

If planting trees is an obvious contribution to combating climate change, restoring the condition of our soils may be less glamorous, but its also crucial – principally because of timing. Whilst it takes a number of years for trees to bulk up and reach peak sequestration rates, soil can make a difference from one year to the next.

It is almost incredible, but nonetheless true to say that few farmers in the postwar period paid much attention to their soil. Haunted by the prospect of being starved into submission by U boats in the War in the Atlantic, postwar Britain put domestic food production high on the list of national priorities. And that trend was magnified when we joined the Common Market and became part of the Common Agricultural Policy. In the name of "efficiency", fields were ploughed up, hedgerows removed and gateways enlarged to cater for ever larger bits of machinery.

Rotations to build fertility naturally which had been practiced for centuries were replaced by monoculture cropping to maximise profitability, and subsidies were paid per head of livestock or per tonne of wheat.

As we exhausted the natural goodness of the soil, we became ever more dependent on artificial inputs, especially nitrogen fertiliser. Just like cutting down trees or extracting fossil fuels, conventional agriculture has been mining the goodness in the soil built up over centuries — living on environmental capital, not on income.

But this can be reversed. On my own farm, I have gone from conventional cropping to regenerative agriculture. I have put the condition of the soil centre stage, re-introducing rotational grazing with livestock. I have stopped ploughing as every time you turn the soil you expose carbon to oxygen and release CO2. And I never leave bare ground, always having a cover crop to generate organic matter above and below ground.

And it amazing to see the soil come back to life. As organic matter increases, the soil recovers its ability to store water, acting like a sponge. The worms come back – going from 7 per m2 to over 50. At those levels, worms are turning over 10% of the soil every year. Effectively doing the ploughing for me. Think of the energy required to pull a 5 furrow plough uphill through heavy clay. Letting the worms do that work is good for me, but its also good for farmland birds!

By reconnecting with natural processes, recognising that we are PART of the tapestry of life, not separate or somehow above it, we live a more harmonious existence; we produce more nutritious food; we become part of the solution to climate change, not part of the problem. By restoring balance and living in harmony, we get closer to the Garden of Eden – and we're happier!

BREAK for SLIDES

In the Creation Story in Genesis Chapter 1, we all know that God gave man "dominion" over the earth. But in its entirely Verse 28 says

"Be fruitful and multiply, and replenish the earth, and subdue it."

We've certainly gone forth and multiplied; and we've certainly subdued the Earth. But have we replenished it? No - we have destroyed it.

In the Garden of Eden, Man chose the Tree of Knowledge over the Tree of Life. It was the ARROGANCE of Man that led God to banish him from the Garden of Eden. In Chapter 3 verse 22 God sees that Man "is become as one of us", so he is banished from the Garden - and God places a flaming sword on the eastern boundary "to keep the way of the tree of life."

The problem is, for 200 years – roughly 1770 to 1970 - the Tree of Knowledge did us pretty well!

The Enlightenment in the 18th century coincided with Mankind harnessing the power of fossil fuels, initially coal. Scientific advances led men to think that we could overcome the forces of Nature that had previously restricted human development. Canals, railways and industrialisation changed the physical landscape just as the Enlightenment changed the moral and spiritual landscape – with society underpinned by scientific REASON rather than by FAITH.

With the benefit of hindsight, Enlightenment ideas of advancement and progress failed to take account of planetary limits! The world population in 1800 was only 1 billion; and even in 1900 it was only 1.6 billion. The explosion in human numbers, and the corresponding crash in non-human life on the planet, has mainly occurred in our lifetime, with the crossover point between sustainability (living on income) and destruction (consuming capital) occurring in the 1970's. Its interesting to note that Rachel Carson's book "Silent Spring" was published in 1962.

To continue to plunder the earth, regardless of the consequences, is a sin – as it demonstrates indifference to the Glory of God's Creation. Of course, God gave Man free will, so the choice is ours – but as Mrs Thatcher famously said "actions have consequences". And we now live in an age of consequences.

According to the World Wildlife Fund's Living Planet Index, we are consuming the capacity of 1.75 planets every year. In other words, we are consuming finite resources more quickly than the earth can replenish them.

We are consuming environmental capital, not living on income.

Every day that we fail to replenish the Earth, we are breaking planetary boundaries, as Kate Raworth describes in her seminal work "Doughnut Economics". We are breaking the Covenant. We know that more of the same is going to end in tears. It's just like the tobacco industry continuing to promote smoking long after the health effects were beyond doubt.

In Genesis Chapter 6, God sent the flood when He realised that the thoughts of the human heart were only evil, and He regretted creating Man. But a small remnant was spared – Noah and his family – along with all the biodiversity of the world famously going into the Ark, two by two.

You may have heard of a movement called "30 by 30", lobbying to set aside 30% of the planet for conservation by 2030. We need to protect rainforests; protect fish stocks; protect soil......protect rare plants and species. Protect from what ??? The answer is - protect it from ourselves! Powered by the Tree of Knowledge; the world economy is based on an entirely EXTRACTIVE model, overlooking the need to "REPLENISH" the earth, as Genesis demands.

How should we react to the apocalyptic future that we face? How can we look our children in the eye and give them hope? One way I have found, is to consider the role of indigenous people. You may remember how in June last year 4 indigenous children in Colombia were found alive and well after wandering in the rainforest for 40 days when the plane carrying them crashed and the pilot and their mother were killed.

That was not only a triumph of endurance and of will, but a demonstration of how people can survive if they have an intimate knowledge of - and connection to - the natural world. Something priceless, which we have lost. Crypto currencies encapsulate everything that is wrong about the world – it may fluctuate wildly, but Bitcoin has a price. But no underlying value. Investing in Bitcoin is pure speculation. It feeds no-one; clothes no-one; provides shelter to no-one. It's the ultimate example of bowing down before the Golden Calf.

On the other hand, the rainforest is of incalculable value, but has no price! Until we change what we value, the odds will continue to favour destruction over conservation.

So, although the world already needs 1.75 planets to maintain current patterns of consumption, every country except Bhutan continues to pursue GROWTH. Our own general election is a case in point, with every party promising to deliver growth. However, there is one group of people who are not focussed on unsustainable extraction and accumulation - indigenous people who not only have KNOWLEDGE as demonstrated by the children in the air crash; but they have WISDOM. Again, something that seems to have been lost in our own culture.

The KNOWLEDGE of plants, coupled with the WISDOM to consider the consequences of one's actions to the tune of 7 generations.

The prophet Isaiah graphically describes destruction of society laid waste by the wrath of God. A passage in Chapter 1 describes the sinful state of Israel like this - "Your country is desolate, your cities are burned with fire: strangers devour your land in your presence, and it is desolate."......BUT, it goes on to say "Except the Lord of hosts had left unto us a very small remnant, we should have been as Sodom, and we should have been like unto Gomorrah."

I suggest to you that this "very small remnant" are indigenous people, still living in the Garden of Eden, still living in harmony with the Glories of Creation. Ironically, these are people who have (by and large) not succumbed to the efforts of missionaries to bring them the "good news" of Christianity. And it is **we** who have lain down and worshipped the Golden Calf, **we** who lie outside the Garden, detached from the natural world, hooked on growth and consumerism....increasingly ignorant of how to restore balance to our lives, or – in other words - how to get back into the Garden.

There are hundreds of indigenous cultures in the Amazon. They all have their Creation stories. Some believe that all life evolved from the division of an original cell, making the birds and bees and animals of the forest their relations; the Yanomami people believe that humans were originally animals, which is why they can reach into the souls of the animals on their spirit journeys – but fundamentally, they ALL consider themselves part of the web of life, profoundly connected to everything around them.

That's why their relationship to the land is literally VITAL, and why they disintegrate when separated from the rhythms of nature. As Davi Yanomani has said

"The forest is alive. It can only die if white people persist in destroying it. If they succeed, the rivers will disappear, the soil will crumble, the trees will shrivel up, and the stones will crack in the heat. We will die one after the other, the white people as well as us. All the shamans will finally perish. Then, if none of them survive to hold it up, the sky will fall."

Echoing a Malthusian belief, in the last paragraph of his magisterial book "The Earth Transformed" Professor Peter Frankopan states "It is easy to answer the question of how the problem of climate change is solved: it will be nature, rather than human action that ultimately brings emissions towards zero. It will do so through catastrophic depopulation, whether through hunger, disease or conflict. With fewer of us around to burn fuel, cut down forests and tear minerals from the earth's crust, the human footprint may become drastically reduced – and we will move closer to the sustainable, lush paradise of our fantasised past. Perhaps we will find our way back there through peaceful means. A historian would not bet on it."

Antonio Gutierres, Secretary General of the United Nations has described this as the "last chance" to rein in the forces of destruction - and some of the most eminent people in our time are echoing the prophesies of the "end of days" in Isaiah, when idols of silver and of gold are cast to the moles and to the bats.

In Isaiah Chapter 5 the Lord looks at his Creation, described as a vineyard, and He asks Himself "what could have been done more to my vineyard, that I have not done in it?" In exasperation, he says

"I will tell you what I will do to my vineyard. I will take away the hedge thereof, and it shall be eaten up; and break down the wall thereof, and it shall be trodden down; and I will lay it waste: it shall not be pruned, nor digged; but there shall come up briers and thorns: I will also command the clouds that they rain no rain on it."

Chapter after chapter, Isaiah warns humanity of the destruction that lies ahead of them if they provoke the anger of the Lord God of Hosts. Rivers drying up, empty nets of fishermen; lack of rain - you can't say we haven't been warned!

But, even in the end of days, there will be two or three berries left in the top of the tree, and four or five in the outmost branches. I suggest to you that these represent indigenous people who maintain their connection with the Tree of Life all the way through.

After all the bloodletting and destruction, the moment of rebirth comes. "Make straight in the desert a highway for our God. Every valley shall be exalted, and every mountain and hill shall be laid low."

"I will open rivers in high places, and fountains in the midst of the valleys: I will make the wilderness a pool of water, and the dry land springs of water.

I will plant in the wilderness the cedar, the shittah tree and the myrtle; and the oil tree. I will set in the desert the fir tree, and the pine and the box tree together.

Thy sun shall no more go down; neither shall thy moon withdraw itself. For the Lord shall be thine everlasting light, and the days of thy mourning shall be ended."

Davi Yanomami says "We have been sad and known the anger of mourning too often. Sometimes we are scared that the white people will finish us off. Yet despite all that, after having cried so much and put the ashes of our dead in oblivion, we live happily. We know that the dead go to rejoin the ghosts of our elders on the sky's back, where game is abundant and feasts endless. We are able to hunt and work in our gardens again. We know that the spirits remain by our side in the forest, and that they still hold the sky in place."

It really is "NOW OR NEVER". Do we as a species have the ability to rein ourselves in ? Or will we suffer the fate outlined by Professor Frankopan ? Heralding the arrival of Christ on Earth, the Advent service says

"It is time for us to wake out of sleep, for deliverance is nearer to us now than it was when we first believed. It is far on in the night; day is near. Let us therefore cast off the deeds of darkness and put on our armour as soldiers of light."

At the end of days, we do eventually get a happy ending. As the Lord's Prayer wishes "Thy kingdom come, on earth as it is in heaven."

If we could only listen to the wisdom of indigenous people, we would spare ourselves much suffering on the journey.