

Climate Crisis and its effects on Terrestrial Environments in an island and its Tourism Industry



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Where are we today – Global Context

When an exploding Human Population of over 7.5 Bill begins to take control, its often forgotten that we are a product and contributor to Life on Earth

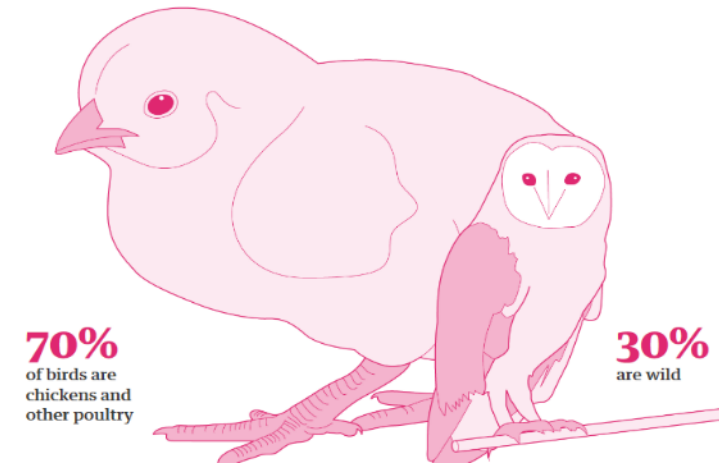
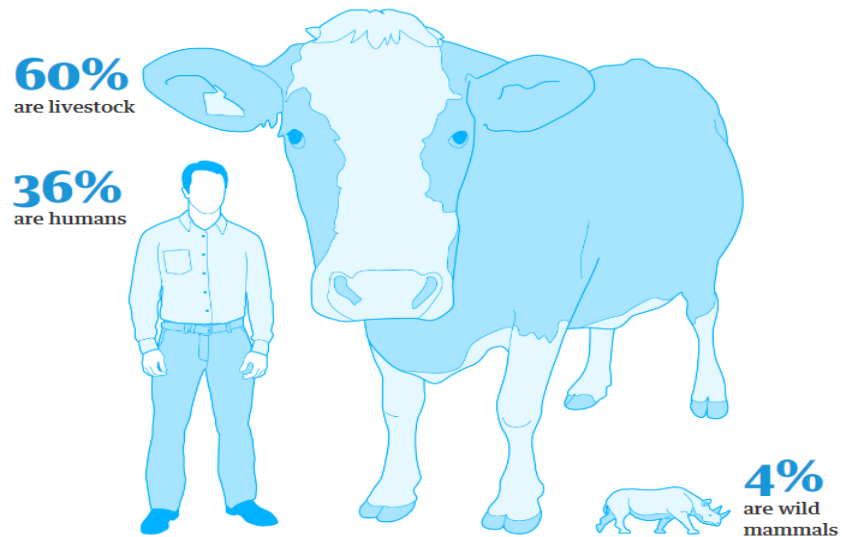
And as Sir.David Attenborough says – we know that intricate connections to nature is vital - yet we break these connections at will at ever faster speed.

Life on Earth is a complex web – and a mass of connections and some connections are more sensitive than others

Mankind must not let greed overtake the need

The sheer magnitude of the intensity of human domination of all things is evident when you consider that

Of all the mammals on Earth, 96% are livestock and humans, only 4% are wild mammals



this is in terms of biomass



Imagine all this is a mere 4 % .. While we make Us and our Livestock are 96 %



Climate Crisis and its effects on Terrestrial Environments

Here at home – consistent threats loom over climate changes that effects Tourism

We are seeing longer droughts and heavier downpours through Monsoons

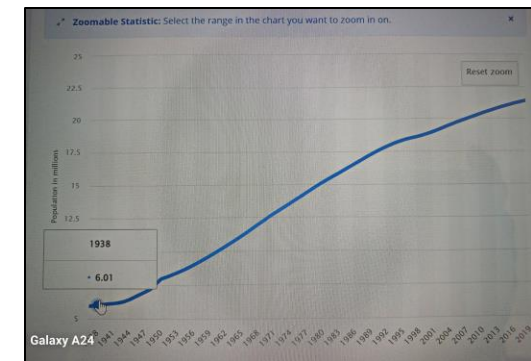
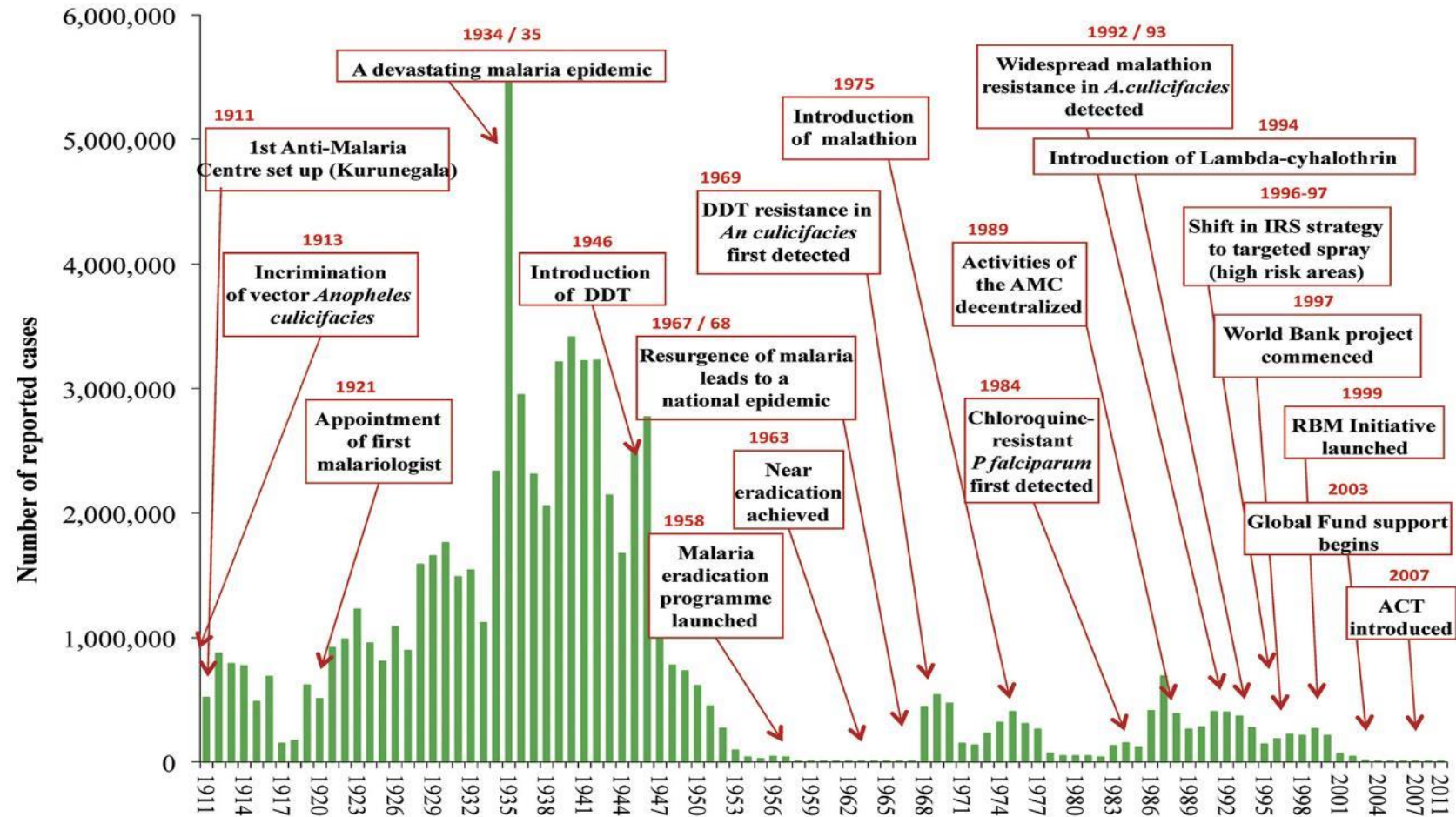
Post monsoonal epidemics such as Influenza and Dengue takes a heavy toll

Dengue is a menace that must be controlled and eradicated

Fortunately, modern medicine and treatment methods have this under some control in the island

Folk living in the highlands often face landslides and the need to move under heavy downpours

The History of Malaria as a crisis and how we overcame this



Lets look at the Implications on the Vital Tourism Industry in Sri Lanka

- I. Tourists when visiting an island looks to avoid monsoon months a primary focus on beach vacations
- II. Rise of Dengue on a holiday destination can have an impact on decision makers choosing Sri Lanka
- III. Crop damages and subsequent protests can make tourists feel unsafe while travelling in the island
- IV. Excessive damage on national park road infrastructure after unprecedented rain can create havoc on park goers plans and disrupt holiday planers expectations and bring disrepute to Sri Lanka
- V. Extended dry months depleting water resources that escalates Human-Animal conflicts
 - I. Post monsoon river flows can be effected thus disrupting the food chains at sea – making spotting star marine mammals such as Blue whales and Sperm whales challenging off Sri Lanka
 - II. Reduced water availability could lead to disputes with local industry and communities.
Climate change is projected to reduce precipitation in some already dry regions of the world. The availability of freshwater is already under pressure in many tourist destinations



Lets rewind the clock a 1000 years and see how Wise ancestors in Early Ceylon dealt with climate change and **MITIGATION**

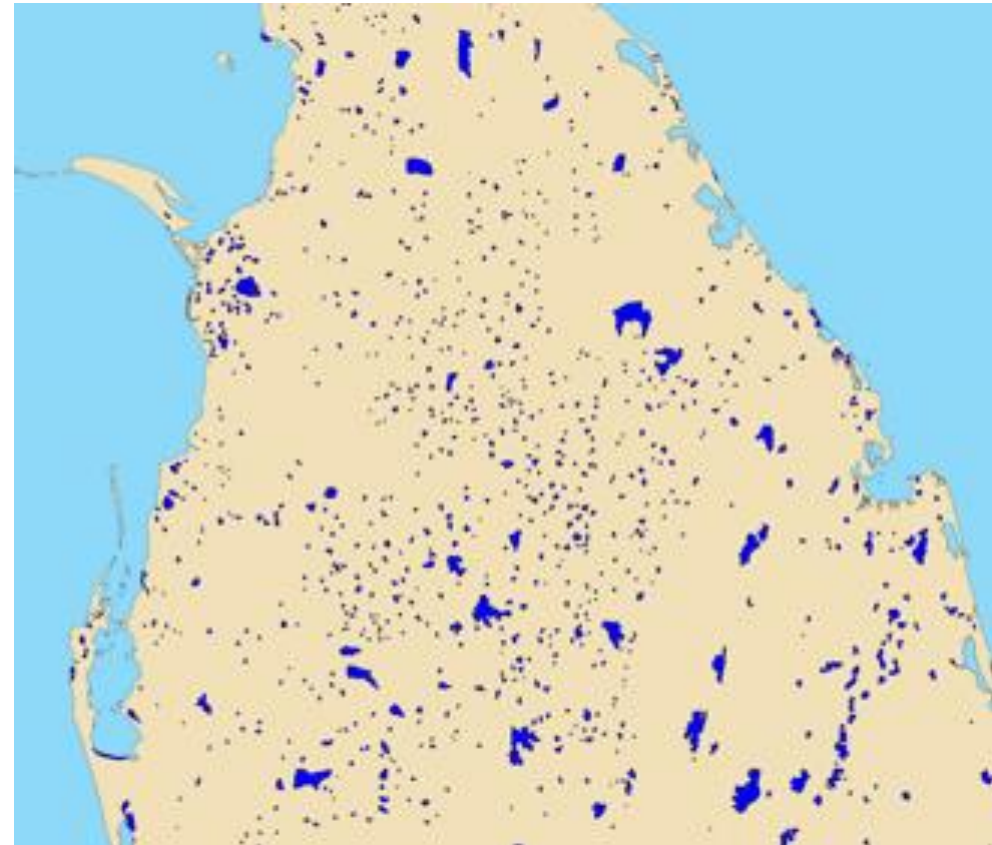
Sri Lanka is an island that Does not have natural Lakes – instead we have dozens of rivers that flow to the sea ad many of that goes dry in the midst of the mid year drought

The extreme hostile climatic challenges faced by ancestors – made them adopt to withstand the inter-monsoonal dry period by Engineering the Landscape of the Island

For this – they developed an art of Irrigational water retention – and called this - **WEWA**

And the name Tank was derived from Portuguese where small reservoirs were called **Tanque** in Portuguese
This evolved to **Tankiya** – in Sinhalese and the Brits took this and made it **Tank** – used in Sri Lanka and India

Now that's climate resilience in Ancient Ceylon when we **engineered** a part of the land to withstand harsh climatic responses through positive intervention





The **Great Elephant Gathering** at Minneriya and Kaudulla National Parks – is a beneficiary of the conscious Engineering of the landscape back in the period 286 AD by successive kings that facilitates and euphoric festival of elephant behavior in modern times

There is no doubt the kings embarked on pining their prosperity in this irrigational engineering for the benefit of mankind – yet the elephants in the North-Central Province were accidental beneficiaries of this reengineering effort, which is today one of Sri Lanka's amazing natural world events



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Through extended periods of climate change – human intervention has helped species to survive and thrive around the concept of a village tank



Why does Tourists arrive in the island

1. Environment
2. Natural World
3. Beaches
4. Charm if this island paradise – its people and the scrumptious cuisine

Challenges for the industry and visitation

- I. Rising Temperature
- II. Rainfall patterns
- III. Rising Sea levels

What are the major issues that can effect the Industry as a result of climate change influencing above factors



Temperature

The world has seen 1.5 Degrees upward in the past century and expected to rise a further 2 degrees by the turn of the present century

there's nothing much we can do to this as an industry – than to carefully choose where we build resorts and accommodation – We can have roofs sloping to the south, which can produce solar harnessed energy that makes most of our **accommodation units net zero** or close.

We can grow more foliage around our environment – that offers shade and keeps the surrounding cooler
(*Creating garden cities such as how early Ceylon did which inspired Singapore does help*)

Rainfall Patterns

Little control we have as an industry with extreme weather while such weather has always been around since biblical times – Not many tourists worry about rains during a tropical holiday

Raising sea-levels

Science says the sea levels may rise by 6 inches in 2050, that's staggering yet unless you've built too close to the sea which isn't permitted after the 2004 Tsunami – all structures can withstand this and most are built for a 50 year cycle

There will be some beach erosion and salinity issues up-stream – yet nothing which can derail the Industry of tourism

I worry more about the Gen Z – responsible traveler feeling guilt of traveling long distance to Sri Lanka and consciously trying to avoid long distance travel – as they are sensitive to the considerable carbon footprint while travelling

What Incentives can we as a destination offer such conscious travelers to arrive in this Island –
with less or no guilt

The Feel Good Factor



MITIGATING THE EFFECTS



- 1) Spacing out long distance Travel – stay for longer when you do travel – looks a great alternative in an island that offers so much for a visitor who travels in over 7000 miles by air
- 2) Plant a tree per each arrival – and invite tourists to help green the planet by travelling to Sri Lanka
This can be in line with SDG goals – and as a major incentive for traveling to green Sri Lanka
(perhaps the tourism levy in the taxation structure can be used for this initiative as 24% of this revenue is managed by the tourism sector)
- 3) Take a leaf from excellent work by **WNPS** – Sri Lanka, and create small corridors between fragmented forest patches – that helps a stronger gene pool and wider distribution of species facilitating their better survival in the long term

This can be achieved as the Government owns most of the RPS's (Regional plantation companies) through which these corridors can be carved facilitating this vital passages)
- 4) Lets not forget we live in an island that is financially strained – hence the industry too must join hands in launching some of these efforts and finance the costs as Government assistance may be not forthcoming



A tiny effort of scientific reforestation yet one in the correct direction

5. Can we plan for Tourism Industry to be Net Zero in 15 years
Lets Not forget we eradicated Malaria – all we need is political will

6. Use of electric vehicles on all tourist transfers – will encourage conscious guests to visit an island that resembles paradise now Switched On to sustainability

7. Climate change can bleach much of the corals, yet we can assist the natural world by dropping complex objects at sea – which helps restore corals and fish congregations in shallow depths



The study conducted by ecologist Greg Asner and his team from **Arizona State University** revealed that large wrecks can serve as **havens for reef-building corals**, which are as diverse as those found on neighboring natural reefs ¹.

The Industry in each tourism destination too need to stand up and be counted on all mitigation fronts – lets Not loose sight of the social responsibility we all owe to this island and the World at large.

For once – can we just DO What's Right

After all, its Our island and our environment that we live and celebrate life on earth

Thank you

