The greatest transformation in human history

Dr. Sailesh Rao
Founder Climate Healers
Healing Humanity

“Everything is going to be fine in the end! If it’s not fine, it’s not the end”

Oscar Wilde
Transforming Your World

“The world does not need to be changed. It needs to be understood.

When you understand the world, you will transform automatically and effortlessly, and the world will change with you.”

Anthony DeMello
Focus on David vs. the Marble Shards
A System of Oppositional "Truths"
- 1993
Logged onto the World Wide Web, I hunt for the date of the Battle of Trafalgar. Hundreds of files show up, and it takes 15 minutes to unravel them—one’s a biography written by an eighth grader, the second is a computer game that doesn’t work and the third is an image of a London monument. None answers my question, and my search is periodically interrupted by messages like, “Too many connections, try again later.”
1000Mb/s
Cannot Be Done!
Why I Became An Environmentalist - 2005
Going Vegan - 2008
On Perfection And Depression - 2009
Discovering The Divine Feminine
- 2010

When The Student Is Ready, The Right Teacher Will Come
Separation Is Untrue - The Wishing Tree Story
Carbon Dharma
- 2011

While drawing upon the ancient Hindu concept of Dharma, or "right action," the book weaves illustrative stories from the author’s life and leads up to a global call to action. Action of a very specific focused kind. Rather than listing hundreds of “change-light-rule” type actions that a lot of us have been doing descriptively but somewhat ineffectively, it lists these specific actions that we can begin to do concretely to make a difference. While changing the world is about changing outcomes, effecting social change requires such concreted action.

Sailesh Rao is the Executive Director of the US 501(c)3 non-profit corporation, Climate Healers, an Electrophysiology Engineer by training. With a Ph.D. from Stanford University in Stanford, CA, Sailesh switched careers and became deeply immerged in the various environmental crises facing humanity after some life changing events and after he watched Vice President Al Gore’s slide show on TV. Carbon Dharma is the result of his preachings over the years.

Using the metaphor of metamorphosis, Carbon Dharma calls for our occupation of the Earth as Butterflies, to undo the damage done by the human species in its present caterpillar stage of existence. It diagnoses the reasons for our caterpillar stage of existence as the misrepresentation of the fundamental principles that underlie our democracy and our industrial civilization.

The book is intended for the youth of this world who are facing some of the greatest challenges ever faced by any generation of human beings. It is also intended for all those who love the youth of the world, for the youth cannot solve these challenges on their own while their parents, grandparents, uncles and aunts continue to put on more and more challenges for them to solve.
The Metaphor Of Metamorphosis
The Top Environmental Problems

Selfishness ➡️ Selflessness
Greed ➡️ Generosity
Apathy ➡️ Activism

“We scientists don’t know how to do that”

“I used to think the top environmental problems were biodiversity loss, ecosystem collapse and climate change.

I thought that with 30 years of good science we could address those problems.

But I was wrong. The top environmental problems are selfishness, greed and apathy...

...and to deal with those we need a spiritual and cultural transformation

- and we scientists don’t know how to do that.”

Gus Speth
The Greatest Transformation in Human History!

“CHANGE is inevitable, but TRANSFORMATION is intentional.”

Tracey L. Martin
Two Industrial Machines of Doom

The Burning Machine
(Fossil Fuels and Industry)

The Killing Machine
(Animal Agriculture)
How To Power Down The Machines?

Source: UN IPCC AR5 WG1 Ch8 Fig 8.17 – base year 175
Annual Emissions of the Burning Machine

Source: Hansen et al. on Faustian Bargain of Fossil Fuels.

7.8 Gt CO2 = 1ppm  
2.84 Gt CH4 = 1ppm

\[
\ln\left(\frac{395}{390}\right) \times 5.35 \times 0.87 \times 0.45 = 0.027 \text{ W/m}^2
\]

\[
(\sqrt{1.85} - \sqrt{1.72}) / (\sqrt{1.85} - \sqrt{0.75}) \times 0.97 \times 0.23 = 0.022 \text{ W/m}^2
\]

100% of SO2  
(363 Mt CH4)  
127 Mt SO2

Total = -0.901 W/m²

87% of CO2  
(39 Gt CO2)  
23% of CH4  
(363 Mt CH4)
Annual Emissions of the Killing Machine

Source: Searchinger et al. for Carbon Opportunity Cost of Animal Agriculture

7.8 Gt CO₂ = 1ppm

29% of CO₂ (39 Gt CO₂)

2.84 Gt CH₄ = 1ppm

37% of CH₄ (363 Mt CH₄)

37% of land (34.5 Gt CO₂)

\[ \ln(\frac{395}{390}) \times 5.35 \times 0.29 \times 0.45 = 0.009 \text{ W/m}^2 \]

\[ 7.8 \text{ Gt CO}_2 = 1 \text{ppm} \]

\[ 2.84 \text{ Gt CH}_4 = 1 \text{ppm} \]

\[ \frac{\sqrt(1.85) - \sqrt(1.72)}{\sqrt(1.85) - \sqrt(0.75)} \times 0.97 \times 0.37 = 0.035 \text{ W/m}^2 \]

\[ \ln(\frac{390}{385.6}) \times 5.35 = 0.060 \text{ W/m}^2 \]

Total = 0.104 W/m²
Vegan Advocacy (2012)
President George H W Bush

“The American Way of Life is Non-Negotiable!”

“Think of every challenge we face. The solution to each is education!”
### The American Way Of Life

<table>
<thead>
<tr>
<th>Culture (Specification)</th>
<th>Civilization (Implementation)</th>
</tr>
</thead>
<tbody>
<tr>
<td>All men (beings) are created equal</td>
<td>One of the most unequal societies in human history</td>
</tr>
<tr>
<td>Inalienable Right to Life,</td>
<td>Colonialism of “Earning a Living”</td>
</tr>
<tr>
<td>Liberty and</td>
<td>Racism of Institutionalized Slavery</td>
</tr>
<tr>
<td>The Pursuit of Happiness</td>
<td>Consumerism of Satisfaction of Desires</td>
</tr>
<tr>
<td>Dr. Martin Luther King’s Dream</td>
<td>Caged Migrant Kid’s Nightmare</td>
</tr>
</tbody>
</table>
When Specification ≠ Implementation

“For a successful technology (civilization), reality must take precedence over public relations, for Nature cannot be fooled.

Richard Feynman
The Colonial Game of Empire
The Fractional Reserve Money Game

Deposit $100

10% reserves ($10)

BANK

90% loaned out ($90)

BANK

10% reserves ($9)

BANK

90% loaned out ($81)
“Earning A Living” In The Game

1. Beg
2. Borrow
3. Work
4. Make
Game Discourages Natural Abundance
The Protein Myth

Source: USDA Food Database and Calorie Counter accessed through http://www.fatsecret.com

9.2g Beef VS. 10.6g Broccoli Stalks
The Calcium Myth

Source: USDA Food Database and Calorie Counter accessed through http://www.fatsecret.com

189mg Whole Milk VS. 1067mg Chia Seeds
USDA “3 Servings of Dairy” is Dietary Racism
What Does Science Say?

“Humans are Herbivores
Dr. Milton Mills

It is unnecessary to eat animal foods of any kind at any stage of our life cycle”
American Dietetic Association
Promotes Death, Disease & Destruction

Toxin -> Animal Food -> Chronic Disease
Colonialism, Racism And Patriarchy
The Almost Invisible and Ubiquitous “ism”
“It boggles my mind how when we have so many diseases that emanate out of that unusual human-animal interface that we don’t just shut it down”

Anthony Fauci
Stressed Animals Spawn Diseases

Source: Dr. Aysha Akhtar, Corona Healers Education and Solutions Summit
Source of Infectious Diseases

Source: Dr. Michael Greger, "Can We Stop A Future Pandemic?"
The Leading Causes of Death

Source: Dr. Michael Greger, "How Not to Die"

A. 14 of the 15 leading causes of death in Western Countries can be mitigated and even reversed with a Whole Foods Plant-Based Vegan Diet

B. Hunger related causes kill more people globally than any other ailment.

Centers for Disease Control
15 Leading Causes of Death

- Heart Disease
- Lung Disease
- Brain Diseases
- Digestive Cancers
- Infections
- Diabetes
- High Blood Pressure
- Liver Diseases
- Blood Cancers
- Kidney Disease
- Breast Cancer
- Suicidal Depression
- Prostate Cancer
- Parkinson’s Disease
- Iatrogenic Causes
Food Insecurity is an Artificial Scarcity

Source: IPCC AR5 Working Group 3 Chapter 11

9.05 Gt of plant food from 45% of the ice-free land area of the planet

- Whole Plant Foods: 7.27 Gt
- Processed Plant Foods: 2.18 Gt
- Animal "Foods": 1.52 Gt
- Other Animal "Products": 0.26 Gt
- Food Waste: 0.14 Gt

Food Intake:
- 0.61 Gt

Transform yourself. Transform your world.
The Leading Cause of Biodiversity Loss

Check the references at climatehealers.org/facts
Burning the Earth for the Killing Machine

Source: NASA Modis Satellite Map of Fires, May 1-10, 2019
The Leading Cause of Ecosystems Collapse
Personal Transformation For Social Change

“Be The Change You Want To See In The World”
i.e., There is no social change without personal transformation

Mahatma Gandhi
1914

The Khadi Movement in the 20th Century

“I consider it my duty to induce people, by every honest means, to wear Khadi.”
Mahatma Gandhi, Navjivan Magazine, 1926

1920
The Salt March of 1930
The Lifestyle Carbon Dividend: Assessment of the Carbon Sequestration Potential of Grasslands and Pasturelands Reverted to Native Forests
Sailesh K. Rao1, Atul K. Jain2, and Shijie Shu2
1 Climate Healers, Phoenix, AZ, USA 2 University of Illinois, Urbana-Champaign, IL, USA

1. The Question
Biomass Distribution of Megafauna

A lifestyle change eliminating livestock has the greatest potential for restoring biomass balance between wild megafauna and human systems.

Livestock systems comprise 45% of the land area and operate at < 4% efficiency in our food system.

In a hypothetical land use system free of livestock, what is the carbon sequestration potential of “re-wilding” lands reverted to native forest biomes?

2. The Analysis
World Land Use Map after Analyzed Lifestyle Change

The integrated Science Assessment Model (ISAM) was used to estimate carbon sequestration potential.

Begin with 2014 HYDE Land Use Data and assume that re-wilded land reverts to native biome extent in 1800.

265 GtC can be sequestered on just 19.6 MKm² of grasslands and pasture lands reverted to native forests.
This is greater than the 240 GtC added to the Earth’s atmosphere since 1700!

3. The Supporting Data
Carbon Cycle

Forest

<table>
<thead>
<tr>
<th>Type</th>
<th>Net Primary Productivity</th>
<th>Soil Organic Carbon</th>
<th>Net Assimilation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tropical Evergreen</td>
<td>1.06</td>
<td>1.76</td>
<td>0.94</td>
</tr>
<tr>
<td>Temperate Evergreen</td>
<td>0.48</td>
<td>1.40</td>
<td>0.51</td>
</tr>
<tr>
<td>Boreal Evergreen</td>
<td>0.39</td>
<td>1.23</td>
<td>0.82</td>
</tr>
<tr>
<td>Tropical Deciduous</td>
<td>0.64</td>
<td>1.52</td>
<td>0.63</td>
</tr>
<tr>
<td>Temperate Deciduous</td>
<td>0.53</td>
<td>1.35</td>
<td>0.50</td>
</tr>
<tr>
<td>Boreal Deciduous</td>
<td>0.21</td>
<td>1.22</td>
<td>0.58</td>
</tr>
</tbody>
</table>
Forbes Reported 7x Growth in 2014-17

"You may not have noticed, but there has been a global shift away from meat in recent years. A full 70% of the world population reportedly is either reducing meat consumption or leaving meat off the table altogether. This is from a report at GlobalData, a leading data and analytics company that works with 4,000 of the world’s largest companies...

[There has been a] 600% increase in people identifying as vegans in the U.S in the last three years (GlobalData). Even Walmart, the world’s largest retailer, is asking its suppliers to offer more plant-based products."...
A Vegan World By 2026!
The Khadi Movement of the 21st Century

“I consider it my duty to induce people, by every honest means, to go VEGAN”

paraphrasing Mahatma Gandhi
WE ARE IN THE MIDST OF THE GREATEST TRANSFORMATION IN HUMAN CIVILIZATION. THIS TIME, IT IS NOT ABOUT CONCENTRATING MORE AND MORE POWER IN THE HANDS OF A FEW BUT INVOLVING POWER TO THE LOCAL LEVEL IN THE HANDS OF THE MANY. THIS IS LIKE A METAMORPHOSIS AND JUST AS IN NATURE, THE OVER-CONSUMING HUMAN CATERPILLAR HAS NO CHOICE BUT TO BECOME A LIFE-AFFIRMING, VEGAN BUTTERFLY.

Carbon Yoga weaves a narrative through the events of the past to show that such a vegan metamorphosis is inevitable and that this system change will occur within the next decade. Both from a scientific perspective and from a religious and spiritual perspective, the narrative proposes an evolutionary process for humanity and for western civilization. During the caterpillar phase, humans unintentionally built all the tools and technologies needed to regulate the Earth’s climate and organize an equitable global human society. But as a consequence, the Earth is habi-

nating in an ever-accelerating toxic polymath. Now we have no choice but to treat all life as sacred in order to preserve ourselves. Such a revolutionary change in human outlook has the added benefit of inducing spiritual awakening, resolvable social justice issues, elevating our connection with all life and improving human health and well-being. It is only such a quest for “moral singularity” that will heal the Earth, rekindle life and lead us to true global sustainability.

Carbon Yoga is the second in a series that began with the 2011 book, “Carbon Dharma: The Occupation of Butterflies.” Carbon Dharma was mainly about what we need to do, as a species, to reach sustainability while Carbon Yoga deals with how we can go about it.
Every Species Has A Role!
The Role for Human Beings is to be the Climate Regulators (Thermostat Species) of Planet EARTH
The Early Anthropocene Theory
The Human Effect

Annotated graphics from William Ruddiman, 2014.
Life’s Thermostat Setting

Annotated graphics from William Ruddiman, 2014.
The VEGAN Meta-morphosis

Vitally Engaged Guardians of Animals and Nature (V.E.G.A.N.)
A Buckminster Fuller Quote

“If you want to teach people a new way of thinking, don't bother trying to teach them. Instead, give them a tool (Game), the use of which will lead to new ways of thinking.”
The Greatest Transformation in Human History!

GO EXTINCT
NORMALIZED VIOLENCE
PREY SPECIES to PREDATOR SPECIES
HOMO SAPIENS SAPIENS

TRANSFORM
NORMAL NONVIOLENCE
CAREGIVER SPECIES
HOMO AHIMSA

THE 7 CORE SHIFTS

Speciesism / Colonialism /
Racism / Ableism / Patriarchy
Diseases / Divisions
Destruction / Pollution
Death / Cruelty
Culture of Consumption
Mindset of Scarcity
Money Driven Economy

VEGANism /
Radical Sacredness
Health / Unity
Remediation / Regeneration
Love / Kindness
Culture of Compassion
Mindset of Abundance
Service Driven Economy
The New Aquarius (3-) Money Game

Flow rate to “pocket” regulated by acts of compassionate service

Flow rate to “heart” for all individuals - promotes a mindset of abundance and radical equality

Flow rate to “community chest” regulated by activity of individual

3- = measure of ecological footprint
The Aquarius System of Earning Money
<table>
<thead>
<tr>
<th>Current Money Game ( $ )</th>
<th>Aquarius ( 3 )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Money created in banks with Required Reserve Rate (RRR) = 3% - 10%. Automatically creates class warfare.</td>
<td>Money flows into every account in the form of a maximum footprint allowance. Automatically creates radical equality.</td>
</tr>
<tr>
<td>Promotes diseases and divisions (humans)</td>
<td>Promotes health and unity (humans)</td>
</tr>
<tr>
<td>Promotes destruction and pollution (earth)</td>
<td>Promotes regeneration and remediation (earth)</td>
</tr>
<tr>
<td>Promotes death and cruelty (animals)</td>
<td>Promotes love and kindness (animals)</td>
</tr>
<tr>
<td>Promotes a culture of consumption</td>
<td>Promotes a culture of compassion</td>
</tr>
<tr>
<td>Promotes a mindset of scarcity</td>
<td>Promotes a mindset of abundance</td>
</tr>
<tr>
<td>Promotes acquisition of money as the primary goal of human activity</td>
<td>Promotes service to others as the primary goal of human activity</td>
</tr>
<tr>
<td>Based on marketing and lies</td>
<td>Based on science and truth</td>
</tr>
<tr>
<td>Economic activity motivated by fear</td>
<td>Economic activity motivated by love</td>
</tr>
</tbody>
</table>
We Must Choose to Play the New Game

“I LOVE you so much that I set you free even from me and you are free to choose.”

*Bhagavad Gita - the Gospel of ACTION!*
More info at ClimateHealers.org

Check the facts at climatehealers.org/facts

Read the books at climatehealers.org/books

To book a tour: pinkypromisetour@gmail.com