Optimal Policies.com

This website is Under Construction. Many links are not working or are under revision.

Our methods use multivariate analysis, thought experiments, and research review, to analyze data and identify best policies and undesirable consequences of alternative policies.

Objectives

- **Identify desirable purposes or goals for government policies**. What should government accomplish and why? What are the unintended consequences of well-meaning or apparently desirable goals or policies?
- **Identify the relative dangers facing human civilization and Earth**, such as global warming, climate change, toxic chemical pollution, excessive garbage, destruction of forests, oceans, species.
- **Create and implement best policies to protect Earth, species, forests, oceans, human civilization**. Among others, reduce energy utilization, reduce garbage production, reduce destruction of forests and life in oceans, clean rivers and oceans. **Sustainable** policies, practices.
- **Provide ideas to better run a government**. Specific suggestions for more efficient, effective, competent government with focus on data systems, saving time and money.
- **Data analysis of large data systems; design of large data system**. Design large systems using a modular approach with interchangeable modules, each with well-defined input and output. Do not use computer programming except in rare cases. Instead, use of-the-shelf software. For data analysis, convert data as input for off-the-shelf statistical software (common mistake in entities, writing software to solve problems already solved).
- **Uniform, standardized policies, practices, procedures**. Standardize a wide range of activities, parts, etc.

As a guide for decision making, I rank major problems in the US and the world as follows; all are preventable and treatable:

- Global infections (when it happens, the US and Europe are NOT ready to stop it).
- Excessive, unnecessary energy consumption
- Excessive, unnecessary garbage
- Chemical pollution
- DNA mutations

- Destruction or termination of species, particularly mammals.
- Destruction of Forests
- Destruction of Oceans and life in oceans
- Global warming and climate change. Fires, storms, floods, insect spreading (dangerous species that carry infectious diseases, eat plants, destroy fruits, trees, etc.)
- Cybercrime, malware, hacking.
- ID theft
- Crime, safety at home, streets.
- Security from wrongdoers, terrorists
- Financial crime.
- Employment, jobs
- Scams, fraud
- Health care
- Education

Global warming and climate change occur slowly. It is relatively easy to measure and notice

We already have excellent data on global temperatures. Storms, fires, floods are easy to see and notice. Countries have time to prepare. A 2C increase in temperature, though it has catastrophic consequences for many species and probably millions of people, is well within the range of human habitats. Humans will adapt. Non-humans, some species may not survive.

DNA mutations are hidden and almost impossible to measure or notice

DNA mutations caused by undesirable chemicals cause two major changes in the body. They change the DNA of many cells; they cause rare or difficult to diagnose and treat disorders, cancer, immune disorders, etc. DNA mutations change the reproductive DNA. This causes irreversible damages to future humans (and other species) and will lead to extinction of most humans. Billions will die everywhere, true equality, rich, poor, famous, VIPs, powerful, etc. The humans most likely to survive live in isolated areas, perhaps high in mountains, where they have no access to modern technology, plastics, garbage, pollution, etc.

Although we can measure most molecules in DNA, the analysis is not yet complete and 100% accurate. It is also very expensive and takes long time. It is

currently impossible to measure the existing DNA of most humans or species. It is currently impossible to determine if the DNA of a specific person is having undesirable mutations due to undesirable chemicals. We can measure a tiny fraction of the hundreds of thousands or perhaps millions of man-made chemicals on Earth (further, small atom, molecular or shape changes can create a molecule with different properties). We cannot or do not measure most toxic or undesirable chemicals in the environment. Further, the measures of toxicity are inappropriate or inadequate (long term cumulative effects are poorly measured).

There are no substantial studies that evaluate the current status of human DNA and how it is changing over time, whether the change is rapid or slow, how it is associated with disease, etc. However, the science is clear (and I will present substantial evidence in about 2 years) that undesirable chemicals (chemical pollutants) can change the DNA of humans and other species.

Many people confuse the relative importance of DNA mutations v. global warming or climate change

As a general rule, global warming or climate change will harm a few hundred million people, many in coastal areas or areas subject to undesirable weather. Damages are slow but obvious.

DNA mutations will harm billions. Damages are slow and hidden.

We must be careful of misleading information and good intentions. Without adequate understanding of the models, it is easy to look at a part of the BIG system problem, and come out with one conclusion, while looking at a different part comes with a different conclusion.

If we are standing in the artic, without clothes, it seems it is always cold. If we stand in Ecuador, with a warm coat, and skiing gloves, it seems hot.

If we walk on the Sahara dessert for a few days, we will be thirsty and feel dry. If we drown in the ocean, we feel wet.

The same person may feel cold, hot, dry, wet depending on the environment. Our perception of events depends on where we are, what we see, etc.

Global warming and climate change will probably kill millions of people and damage cities, coastal areas and zones affects by storms, dry weather, fires, etc. Most people will adapt and survive, though many species cannot.

Chemical pollution will kill hundreds of millions of people everywhere, and will change both body cells and reproductive DNA in complex, irreversible ways. The changes to cells will cause cancers and a wide range of complex diseases very difficult to treat. The irreversible changes to reproductive DNA will transform the human race into mutants with weird disorders that will extinguish reproduction (and humans). These are not the mutants we see in movies. These are DNA changes that make cells sick or cause small variations in organs.

The mutations induced by chemical pollution involve portions of DNA highly protected via evolution and highly unlikely to occur during evolution. Further, the magnitude and suddenness of mutations (most occurring within about 100 years instead of 5M years) are far beyond anything possible during evolution.

It means more cancer. It means kidney cells do not work as well and kidneys fail early. Brain mutations means weird thinking which we call autism or schizophrenia or mental disease or reduced mental function at an early age. Reproductive mutations mean organs distorted or autism or schizophrenia or organ dysfunction, some obvious, some hidden. It is cumulative. It is transferred across generations and gets worse.

I like to compare global warming, climate change and chemical pollution that changes DNA with my experience with Trans Fatty Acids (TFA or trans fats).

My experience with TFAs

I invented and implemented technology that allowed me to accurately measure TFAs in human blood. To the best of my knowledge, I was the first scientist to accurately measure TFAs in blood. I found that patients with cardiovascular disease (CVD) and other disorders had high levels of TFA.

I found a mathematical relationship between TFA and TC/HDL using samples from the Framingham Heart Study and others. From my analysis, I concluded:

It is better to eat fewer foods with TFAs.

It is healthier to eat foods close to their natural state, with many membranes and many essential fats (or PUFAs or essential fatty acids).

As a risk for cardiovascular disease and other diseases, the most substantial factors in the US, by relative importance, are (with many caveats):

- Being far from ideal, slim weight. Instead of saving food as fat for emergencies, we can save food in the refrigerator (or, even better, buy food only when we need, and keep some for emergencies like earthquakes, quarantine, storms, etc.). Eating too many calories.
- Not eating enough PUFAs or foods rich in cells close to their natural state. Eating too many processed foods such as breads, pasta, cereals, desserts.
- Eating hydrogenated fats with TFAs.

TFA, excessive TFA. TFA does not have a lobbying group, someone who profits substantially, has billions, defends them. My message was simplified to the simple, profitable one: replace TFA in foods with other profitable oils. That way, people can continue to eat French Fries, fried foods or whatever. Forget about eating foods close to their natural state. They have low shelf life, go bad quickly, are less profitable, cost more, and people are less likely to buy them. TFAs are not replaced with healthier oils are I recommend. Losing weight is incompatible with eating a lot, drinking a lot, watching TV. People do not want to eat far less, they prefer to continue doing what they are doing (the data shows that overweight is not declining despite millions of research and public policy).

Companies could make substantial money if they replace TFA with other oils such as tropical oils, genetically modified soybean to reduce unsaturation. There are many ways to modify oils to make them more stable and replace TFAs. Can also use butter, which benefits dairy.

The hydrogenated oil companies can adapt their factories to make other oils. Nobody needs to lose money. The makers of fried food can use a different oil. If there are additional costs, they are small and passed on to consumers. Everybody makes money. The researchers get more funding, promotions, better jobs, consulting work, lectures, books. Politicians, public health supervisors, they all get good grades for promoting the public good, preventing CVD and whatever.

What is omitted from all these research and writing is that TFAs are a minor factor in CVD, NOT a major factor. Further, replacing TFAs with other oils likely has similar effects to TFA, so the benefits are tiny, if any. Further, if people think they are now eating healthier fats, they eat more and gain weight. But everybody feels good. People avoid TFAs and think they eat healthier and are doing what doctors, opinion makers and public health supervisors recommend. Companies replace TFA with other oils, and comply with guidelines from USDA, FDA, HHS, departments of public health, researchers, whatever. Those who make money probably feel well. Consumers like it to. Easy to comply. No need to stop eating or drinking or smoking or changing lifestyle. That is too difficult, I think.

But, the major problem, CVD, is barely reduced. And the incidentals are creating more CVD, cancer, and other diseases. The food is almost as bad, or

perhaps worse. Nevertheless, **properly replacing TFAs increases life expectancy for millions.**

My research showed that EFAs are the major factor, TFA a minor factor, almost irrelevant the way they were replaced. The TFAs were supposed to be replaced with healthy foods, natural foods close to their natural state, not foods fried in oils and fats. That is what I recommended. But alternatives may be more profitable to tropical oils and many industries.

My research showed that the major factors in CVD are eating too much, not eating healthy foods. Eating too many TFAs is a minor issue. However, it seems that the focus is on eating fewer TFA and replacing them with other fats, because it is easy and profitable.

A similar issue occurs with global warming and climate change. The real problems are excessive energy utilization, excessive garbage and waste production, toxic chemicals, destruction of forests and oceans (not by global warming, but by human activity such as farming, fishing, travel, etc.). These harms are caused by humans. The solutions involve fewer humans, reduced travel, etc. That is practically impossible. Instead, governments pretend to reduce global warming because it is much easier to do and does not require population restrictions, eliminating garbage and toxic chemicals, cleaning the oceans, eating less (so we require less farming and protect forests), cut travel, etc.

Global Warming, excessive CO2. CO2, heat, does not have a lobbying group, someone who profits substantially, has billions, defends them. One may thing that the entities who emit too much CO2 and profit would oppose reduction of CO2. But it is better for them to continue to emit and support alternatives such as more trees or exchange rights to CO2 or filters or machines that absorb CO2, etc.

If we create a model of Disease or death = F(CO2, heat production, global warming, climate change = storms, etc.), we find that the model is incomplete. The probability of disease or death today depends on variables (factors) that are different from the probability of disease or death in 50 years from now.

The major factor in Disease or death in 50+ years from now is genetic changes, damages to DNA. It does not kill rapidly like an infection or a bullet or cancer, but it changes DNA so much that human reproduction and survival may be impossible.

Many opinion makers and people focus today on excessive heat, CO2, global warming, because it is profitable. Companies that contribute to global warming and countries agree to reduce it. It means more business for many. Companies will create devices and methods to reduce rate of increase in

Temperature (T), reduce global warmings. But some may benefit from storms, heat (e.g., A/C companies), energy use.

This is technically and sociologically feasible. There is no way to build a machine that compresses a person to lose weight. We can have substantial surgery, but it is expensive, tricky, and may not work.

Unfortunately, the biggest culprit or cause of higher energy use, higher temperatures, destruction of habitats, forests, toxic chemicals, is too many people. Nobody is proposing to substantially reduce population growth. Quite the contrary. In the US, MANY local, state and national governments want MORE growth. To appear to protect the environment, they offer "sustainable" growth or "smart" growth or whatever. Meaningful solutions are difficult to implement, so countries may persuade people that adequate alternatives exist.

Probably reducing irreversible DNA damage could be marketed as preventing undesirable DNA changes while protecting evolution and adaptation (nonsense, if you don't know it). It may look good, but reducing irreversible DNA is extremely difficult. We can slow it down, so the human race may disappear in 150 instead of 100 years. But the damage is irreversible (highly unlikely that we can change millions of DNA molecules, damaged by toxic chemicals).

Follow the money to find the reasons why some things happen.

Plastic bags have lobbyists. They may be winning. "Eight states ban the bag, but nearly twice as many have laws protecting them." https://www.politico.com/news/2020/01/20/plastic-bags-have-lobbyists-winning-100587?utm_source=pocket-newtab. Thus, it is difficult to eliminate plastic bags. Even if we did, there are thousands of other uses for plastics.

Fish, trees, mammals, the animals dead from fires in Australia or California, tigers, lions, elephants, etc. They do not have strong lobbyists. They can die, and, outside a few protests, most people will keep doing whatever they do (singing, eating, watching videos, read or write twits, drink, drink more, etc.).

Stopping population and economic growth stops excessive energy consumption. It is unlikely to occur. If countries stop all fishing in oceans, and

convert fishing ships to garbage collectors, we clean the oceans and allow ocean life to recover. What are odds? Almost zero. When most fish are dead, there may be more opportunities to convert water to drinking water or use the oceans for living space. Profits continue.

We can protect a few trees and animals from destruction. Then there is a huge fire or storm, or the land is needed for agriculture or cows or pigs and profits, and we cut the trees (and sell them), burn the land and use it to feed more people. Whenever the choice is between saving forests, oceans, fish, mammals, and higher speed internet, more cars, more clothing, more houses, more food, the profitable choice is . . . . The ethics, moral choice is the same, because PEOPLE come first (and almost nobody wants to volunteer their body and organs to reduce energy consumption).

Society must consider population growth reductions; several alternatives exist and discussed in professional publications.

Philosophy goals

We aspire to Menschkeit. From https://www.peterswank.com/menschkeit

"A person having admirable, noble, or dignified characteristics, such as fortitude, responsibility, and firmness of purpose"; fundamental decency.

"A person who is admired, respected, and trusted because of a sense of ethics, fairness, and nobility"

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