

Two Critical Problems Facing the USA and the World

Katta G. Murty

Department of Industrial and Operations Engineering
University of Michigan, Ann Arbor, Michigan 48109-2117, USA
Phone: 734-763-3513; fax: 734-764-3451; e-mail: katta_murty@umich.edu
webpage: <http://www-personal.engin.umich.edu/~murty/>

16 May 1999

Abstract

Two critical problems facing the USA and the world are huge population and its continuing growth, and mass destruction of trees for short term uses. We present these problems and urge that a campaign be adopted to grow less children and to grow more trees.

Key words: Huge population and its continuing growth, trees, lean nation, grow more trees, grow less children, Murty's law on pollution, peace for humans and extinction for other species.

1 Introduction

We begin this article with a story.

Once on a visit to Boston, I thought I recognized a face while walking in a mall. I could not recall the name right away, but after a few seconds realized it was my friend Ram from college days. I walked back to the man, and with an outstretched hand asked "Excuse me, are n't you Ram?" He did not take my hand, and in fact seemed to turn away. I walked around and said "Ram, don't you recognize me? I am your best friend Murty". With an air of resignation he replied "Hi Murty, how are you?" I said "I am very happy to meet you here by chance after so many years. What happened to you during this time?" He said "It is a long story. I will tell you if you are interested". And we moved towards a quiet bench and sat down. I noticed that he sat a slight distance away from me.

In college, Ram was lively and fun loving. With rounded cheeks his face always exuded a youthful glow. He loved nature, and used to be highly critical of development that involved clearing natural or wooded areas. He used to say that man-made creations such as a highway, lawns, golfcourses, ski slopes, or skyscrapers are ugly when viewed against the incomparable beauty of a clump of trees or a forest. He would argue vehemently for putting a worldwide moratorium on any further human incursion into undeveloped areas.

The years have taken their toll on him. The glow in his face is replaced by a paleness, and his cheeks appeared hollow.

"You know how much I love nature. Last summer I got the chance of visiting the tropical rain forest. I rented a car and was exploring the marvellous scenery. However, by the afternoon my car developed problems. I received a painful cut in my finger while lifting the hood, which bled profusely; but could not restart the car. It was in the middle of the rain forest, and there was no other human being within sight. I did not know what to do, and began thinking how unfortunate I

have been, to have my rental car fail in this place where I cannot get any help. I felt that this has taken me to the upper limit of unhappiness.

After about an hour I saw a car approaching. I flagged it down. Rolling his window, the driver asked whether I was having car trouble. He inspected my car but could not start it either. As the evening was approaching rapidly, he said "I am afraid you have to stay here tonight. There are no hotels in the neighborhood, but my house is closeby, and we have a guest room you can use. I invite you to spend the night in my house. We can call the service station tomorrow to get your car fixed". There was no other choice, so I expressed my gratitude and accepted his invitation.

His wife greeted us when we entered his house. She was very friendly, and welcomed me with the most beautiful smile I have ever seen. Her teeth were like a row of shiny pearls, all perfectly symmetrical and absolutely faultless. Watching her round face with its light pink skin and stunning features, I just could not take my eyes off her. Within seconds we were joined by an equally beautiful younger lady, their daughter. The two ladies had a close resemblance, and looked more like two sisters than a mother and daughter. I have never seen such beautiful women before.

Darkness set in very quickly. Dinner was prepared, and we sat down to eat. I did not want to appear to be staring, but could not help stealing glances at the two gorgeous ladies. After dinner we chatted for a little while, and then they took me to the guest room and said goodnight.

As I laid down on my bed, the memory of their stunning beauty lingered in my mind as I drifted off into a light sleep. Then I was awakened by the slight click of the door latch. Someone was opening my door silently. Since it was pitch dark, I could not see who it was, so I lifted my hand towards the light switch. The visitor reached my bed with quick but quiet steps, and put her little finger very gently on my lips as if to implore me not to turn on the light or make any sound. Her finger felt so soft against my lips that I could not contain my excitement, so I grabbed her right hand and pulling her towards me tried to kiss. She hesitated, but yielded to my force. It was clear that both of us are at the peak of excitement. I whispered "I do not want to get you in trouble. What can we do, I do not have a . . . ". But she came fully prepared, and handed me a packet. She has taken me to the limits of ecstasy. And when it was all over, she caressed me gently on the cheek, and left the room as quietly as she came in.

I was in a state of extreme bliss. Only a few hours ago I was cursing my misfortune at my rental car not starting, and thinking that it was my moment of maximum bad luck. But that event actually lead to this most marvellous experience of my life, with the most beautiful woman on earth. I decided that this is the best thing that happened to me in life. I thought that this is an optimum situation for me, the moment of maximum happiness. And there is still a mystery, as I could not figure out whether it was the mother or the daughter.

I was still in suspense next morning at breakfast. I looked with enquiring glances, but neither mother nor daughter gave me any sign. After breakfast my host took me to the service station and made arrangements to have the car checked. It needed major repairs, and they did not have all the necessary parts. They said that they will call for the parts and complete the repair when they arrive, which may take upto a week. My host encouraged me to continue staying with them, I accepted his invitation gratefully and looked forward to the evening with eager expectation.

The same drama was repeated the second night, and each successive night. I was at the peak of my happiness, but could not resolve the mystery of whether it is the mother or the daughter. And neither of them gave any clues.

The parts arrived, and finally my car was fixed. It was time to take leave. I thanked my host profusely, and said "I am very happy to have met all the membrs of your wonderful family". My host replied "Oh, we also have an older daughter whom you have not met. She does not come out much because of her bad health". "What is her problem?" I asked. He said "Unfortunately, she suffers from AIDS".....

The person in the story, Ram, yielded to a temptation leading to a short term pleasure, without checking its long term consequences. It was thrilling while it lasted, but its consequences were disastrous for the rest of his life. When viewed in the context of setting national policy, the moral of the story is that the long term effects of any action taken have to be weighed very carefully, however fantastic the short term benefits of these actions may appear to be.

My aim is to present two problems that are very critical not only in the rest of the world, but also in USA. These are: (1) High Population and its Continuing Growth, and (2) Conversion of Nice Trees Into Instant Trash. At the moment, in most of the nations in the world including the USA, these problems are just ignored by governments. This inaction is mainly due to caving in to the pressure for the short term benefit of powerful vested interests or dogmatic groups; and does not bode well for the long term interests of humanity.

2 High Population and its Continuing Growth

In the USA, there is a tremendous amount of indirect propaganda for everyone to produce more children. Recently, several couples produced 6 to 7 children per pregnancy, and there was very wide acclaim for these parents. They were praised in all media (TV, newspapers, magazines, etc., etc.) for months and months and months, and they received huge financial rewards *for their magnificent achievements* ! This type of publicity glamorizes the act of producing more children. In fact, most Americans of all skin colors are producing at least 3, 4 children these days. This is not a good trend.

The world's human population is presently 6 billion, and may exceed 12 billion by 2050. This need not happen, because we can , and we should, definitely prevent it. Countries like Bangladesh, Pakistan, India, China let their populations get too large, and we are seeing the immense suffering their people are undergoing daily because of it. We in USA should learn from their experience and take steps from committing the same mistake ourselves. Instead, our actions and policies make it seem that we are very eagerly rushing ahead to catch up with them in also having a very high population density.

Anyone with open eyes can see the tremendous growth in population taking place all over the USA. Cities like Atlanta, GA, which used to be very nice places to live hardly 25 years ago, have expanded so much that for people living there life is becoming unpleasant. Same thing happening all over USA, in formerly small villages and towns.

Also, once the population reaches a certain level, it never seems to come down. So the discomfort lasts forever.

The already huge population, and its continuing rapid growth, are the most serious problems leading to several others, in the USA and in the world today. Yet none of the governmental agencies in USA want to address this problem. Instead, a good deal of research supported by these agencies, tends to worsen the problem.

The serious consequences of overpopulation have already been analyzed very thoroughly in numerous publications so far. The most recent is the book [1] in which Paul Simon analyzes the serious implications in the USA and elsewhere, of the coming worldwide water shortage triggered by the already enormous size of the human population.

Many Americans are unaware of the population problem in their country. They believe that it is a problem in countries like China and India, but not in USA. India had a reasonable population of 310 million when it celebrated its independence from British rule in 1947. Now, 50 years later, India's population tripled to 930 million in spite of the heavy propaganda for population control by the government. The population of USA is mushrooming too under the double-whammy of births and immigration, it has almost doubled since the early 1960's. If present trends are allowed to continue, the USA will join China, India as a country with a massively large population before too long. We are already headed to becoming the next billion-people country (after China, India which are already there) in the not-too-distant future, an honorable designation that we should try very seriously to never receive.

We are already seeing the symptoms of overpopulation in USA. In the 1960s even if you searched with a microscope you could not see a beggar in USA. Now everybody says that USA is at an economic pinnacle, and yet we see beggars in all big cities. Also, for the first time in history, at the beginning of January 1999, most large airports in USA looked like third class waiting rooms in large railway stations in India.

Many people argue that it is not necessary to control the population because our technology can increase the food production several folds, find a lot more crude oil and natural gas, and eventually

even master the technique of generating vast amounts of energy from sea water through controlled thermonuclear fusion. They forget that technology is never 100% benign. It always comes with unforeseen and undesirable side effects such as pollution, warming of the atmosphere, ozone hole expansion, etc. etc. Even granting that all the above things can be achieved without any harmful side effects, these proponents for ignoring the population problem forget the fact that man does not live by bread and TV alone. We are already running out of space. More than 95% of nature is already destroyed by human occupation and control, and many of the creatures like the dodo bird, passenger pigeon, sea creatures like fish and whales, have either been already dispatched to extinction or brought closer to extinction by human exploitation. Even when well-fed, most humans would find life in cramped quarters without the opportunity to observe natural sceneries frequently, quite unpleasant; and this usually leads to many undesirable and violent behavior patterns in society. So, what is so sacred about allowing human population to continue to grow when it is making the life of everyone uncomfortable and even plain miserable ? Actually, what is really sacred is **nature** which is being decimated by the already large population and its continuing growth.

In the past, in countries in Asia, Africa, Europe, whenever the population level exceeded the capacity of the food production system of the country, vigorous **Grow More Food** campaigns used to be launched. That practice usually alleviated the problem temporarily by bringing more virgin land under cultivation. Now we have reached a stage where most of the land is dedicated to some sort of human activity, so the opportunity to extend the crop growing area is becoming highly diminished. In the same vein, the author of [1] recommends that we start a massive plan to convert seawater to usable water by desalination on a large scale, to stave off the impending worldwide water shortage. This can result in a massive increase in several types of pollution. Clearly, such technological feats can at best provide temporary relief for a short time in the life of a nation. It is high time that we accept the inevitable and start a **GROW LESS CHILDREN** campaign, make it the hallmark of national policies all over the world, and work hard to make it a success.

I have scanned literally hundreds of articles on pollution, overcrowding, traffic congestion, etc. published in popular magazines, journals, and books. These articles usually contain a section with the title *What you can do*. In almost all these articles I found that this section contained mostly trivial and inconsequential suggestions, but scrupulously avoided mentioning the best action that each individual can take to alleviate the problem, which is to produce less number of children. It is high time that we change this practice and begin advising all individuals to produce less number of children to save the world. **It is our sacred duty to keep human population very low.**

2.1 A Lean Nation for Long Term Survival

After many years of observation and research, medical science has finally recognized obesity as a symptom of illness in the human body. For long term survival in a state of good health, they advocate that everyone should control their fatness to achieve a *lean body*.

A nation which is overpopulated, can be compared to an obese human body. Just as a human being has to control his/her fatness for maintaining good health, a nation has to control its population size for the well-being of its subjects. A nation can be defined to be a **LEAN NATION** if its population is so small that its citizens do not have to live in cramped quarters, and it can leave plenty of space for nature to thrive on its own without being trampled by humans. Lean nations are best equipped for long term survival. Unfortunately, today there are very few nations which are still lean. It is high time for adopting policies all over the world to take all nations back to lean status.

I seek the reader's active participation and help in enhancing public respect for people having small families, in forcing the government to adopt tax and immigration policies that take the very negative long term effects of the growth in the population into account, and in making **GROW LESS CHILDREN** a very popular motto and this campaign a great success.

3 Good Life for All Humans

Through technology, we have already acquired several powers that were formerly attributed to our gods in our sacred religious texts. Most of us are well-intentioned to contribute for the betterment of

the human condition, but we need to realize that even if newer developments in technology put in our hands many more of these god-like powers, **good life for all** is only possible if human population is kept low.

4 Solution to Pollution

As population keeps on increasing, so does pollution. All the governments are allocating a lot of research funds to study pollution with the hope that some day a technology will be discovered that will eliminate all pollution without causing any hardship to our lifestyles.

Anyone who has studied human behavior knows that there is really no end to human desires. If a technology to control the pollution in satisfying one desire is discovered and successfully implemented, then we will have another desire that generates much more pollution. And this process continues. Having observed this several times, I have formulated the following law:

Murty's Law on Pollution: Technology can only transfer pollution from one geographical region to another, or from one medium (land, water, air) to another, but cannot reduce the total pollution created per person

A careful study will clearly establish the truth of this law. Since people are unwilling to change their lifestyles, pollution grows in direct proportion to the population. To cut down on pollution, eventually we have to adopt simpler lifestyles (highly unpopular) and reduce our population to a sustainable level.

5 Peace for Humans, Extinction for Other Species

We always talk about **world peace** as a very sacred and lofty goal. I once watched the Miss Universe contest on TV. The contestants are very beautiful girls from all over the world. The contest involves evaluation of not only physical beauty and looks, but also talents in swimming, dancing, singing, debating, and many other skills. After many tests, five finalists are selected. In a final test each of these finalists is asked to respond to one question. That question was "If you are granted just one wish, what will it be?". The winning finalist's response was "world peace". She explained that it means peace for all the people all over the world. She received very wild applause, and was selected as Miss Universe for that response.

We human beings are so damn self-centered. We talk about peace only for ourselves. The numbers of other large animals and trees etc. are already down to very small numbers due to merciless killing by the already 7 billion and soon to be 15 billion humans. Don't you think the 200 manitees living in coastal waters of Florida, 300 pink dolphins living in the sea around Hong Kong, 150 mountain lions still left in California, a few thousand elephants, lions, tigers, gorillas in Africa, Asia; a few thousand majestic mahogany trees in South America, a few hundred rhinoceros in India, etc. deserve some peace for themselves at least now? Their home is being encroached upon by the ever growing human population relentlessly.

Let me relate an experience from my childhood. As a teenager growing up in India, I remember going on a vacation trip by boat on Kolleru (a huge shallow lake, wetlands area) with my family in the 1940s. It was a sailboat maneuvered by two oarsmen, and did not have any motor powered equipment on it. To my kid's eyes the lake appeared very huge. Our destination was a temple for the lake goddess Kolleru on a small island in the middle of the lake. It took us two whole days to reach the temple, and another two days to return. All along we saw innumerable types of water fowl, and an abundantly growing lake tree called "bendu" ("cork"). The trees have two to four inch thick trunks of corklike material which was very soft and spongy inside with a green colored bark on the outside. We kids had lot of fun fighting with each other with the branches of this tree. You can hit siblings with great force with this branch, but it would not hurt because of the softness of the wood.

During a recent trip to India, I went to visit Kolleru again. Alas, the lake is completely gone. It was drained for building houses for the growing human population, and for growing more rice for human consumption. All the nice waterfowl are gone, and the beautiful cork tree in that lake is now extinct. Unfortunately, the Lake Goddess was not able to protect her beautiful lake, and all the gentle creatures and plants she created in it, from being destroyed by humans. All these species have perished from human encroachment of their habitat. Today, the same thing continues at a faster rate all over the world, perhaps more so in USA than elsewhere.

We humans want peace to produce more of our own. Our actions, and treatment of other species is such that they can find peace only in their death and extinction. **When will we humans realize that it is our sacred duty to keep the human population low?**

6 Converting Nice Trees Into Instant Trash

In the USA we have become experts in converting nicely growing young trees into paper products like newspapers, telephone directories, magazines, paper plates and napkins, etc. that have a very short useful life and eventually become paper trash. The quantity of paper that we use is much higher than any other country in the world. In fact some countries like Canada are depleting their forests to meet the US demand for paper.

It is possible to reduce the amount of paper devoted to such short-time-uses easily, but nobody seems to care. For example, is it really necessary to print new telephone directories every year? Why not increase the interval between reprints to two years? This will reduce the paper use for telephone directories by 50%. In fact with the development of the internet, we can arrange in such a way that anyone with a computer can access telephone numbers on the computer screen without needing a paper copy. But the phone companies want to publish new phone directories every year because they make huge sums of money from advertising revenues.

In the same way it is quite easy for newspaper companies to adopt the policy that their advertisement sections will only be printed on alternate days (or 3 days a week), and on other days they would just issue a very slim version with the news only. This will cut their paper use by 50% without any significant loss in exposure. In fact with current internet technology newspaper text can be delivered electronically without printing it on paper at all. However, newspaper companies continue producing their product every day, most of which is junked by the public on the same day it is produced without even being read. Why? Because they do not consider saving the lives of some trees to be very important.

Another product is toilet tissue. We now have bidet-with-vertical-sprays which are much cleaner, healthier than toilet tissue for cleaning the human body with water, without the need for any paper product. With the simple turn of a cap, this tool produces a powerful stream of water vertically upwards to clean the body. It is a totally hands-free operation that is so pleasant to use. If majority of households in our country switch to bidet-with-vertical-sprays, we will not only save a lot of trees, but also reduce the amount of sewage to be treated substantially.

What is the reason for our callous attitude towards trees? Mainly because most of us think that trees are there for us to kill and use anyway we like.

The American poet Alfred Joyce Kilmer(1886-1918) wrote a very famous poem about the beauty of trees which we quote:

Trees.

I think that I shall never see
A poem lovely as a tree.
A tree whose hungry mouth is prest
Against the earth's sweet flowing breast;
A tree that looks at God all day,
And lifts her leafy arms to pray;
A tree that may in summer wear
A nest of robins in her hair;

Upon whose bosom snow has lain;
Who intimately lives with rain.
Poems are made by fools like me,
But only God can make a tree.

Unfortunately, most present generation Americans do not seem to have this kind of respect for trees.

In nature many tree seedlings come up, but most of them are killed by us in mowing, weeding, cultivating, thinning, golfing, skiing, snowmobiling, driving, or other forms of trampling involved in human activities. So, the few that survive and grow in spite of all this mishandling should be harvested only for really essential uses. We need to appreciate that the purpose of trees in nature is to grow, their main purpose in life is not to be killed by greedy humans for conversion into instant trash.

Within a few years, a tree crisis of catastrophic proportions will explode on us, unless we demand of our leaders to design governmental policies and tax structures that would tend to encourage reducing the use of paper for such short life products as newspapers, toilet tissue, phone directories, paper plates and napkins, etc.

As a first step, I appeal to readers who subscribe to paper versions of newspapers to try to terminate that subscription, or at least share that paper copy with several friends, office-mates, and neighbors. You probably watch the news on TV, or hear them on the radio; so reading a day-old newspaper shared with a friend will not be a great inconvenience. Any effort to reduce sales of newspaper-on-paper will definitely help tree survival.

7 References

- [1] P. Simon, *Tapped Out*, Welcome Rain Publishers, 1998.

The United States of America is the world's foremost economic and military power. It has the third largest population in the world (325 million) and its economy produces around one quarter of the world's wealth – \$17.97 trillion in 2015. Income in 2015 was \$56,300 per capita, one of the highest in the developed world. The USA's cultural influence extends across the world, for example over two billion people speak some English in the world today with the majority speaking an Americanised version of the language. US TV programmes, films, video games and music have a large domestic market of more than 300 million customers, in addition to their influence on the rest of the world. The former US ambassador to the United Nations, Nikki Haley, urged Americans to "wake up" in the face of the threat of China becoming the world's preeminent power, as China might use the COVID-19 pandemic to extend its influence among the world's nations, Fox News reported Monday. In an interview with Fox News, Haley reminded journalists of the criticism that US President Trump's decision to shut down travel with China amidst the outbreak of the new coronavirus received earlier this year, as later the pandemic swept over the US. "The problem is wake up, America. This is nothing small. China has wanted to dominate the world for a long time. They want to bring down America and they almost did that with the coronavirus," Haley said. This is a list of global issues. Informally, a global issue (problem, risk) that adversely affects the global community and environment, possibly in a catastrophic way, including environmental issues, political crisis, social issues and economic crisis. Solutions to global issues generally require cooperation among nations. In their book *Global Issues*, Hite and Seitz emphasize that global issues are qualitatively different from international affairs and that the former arise from growing