

MYTH #11: Countries Should First Get Rich, Then Worry about Health and the Environment

“...the purpose of economics is to find out how to increase human welfare. Human welfare is a complex condition, the increase of which involves far more than the mere maximisation of production and consumption. Welfare has to do with health and human needs, with mental, emotional and spiritual matters, as well as with physical wellbeing and with social and environmental issues.” – Paul Ekins¹

“When you look at the world in that way – from the standpoint of: ‘What are our most fundamental needs?’ – then it just seems crazy that we use air, water and land as a garbage can to dump our most toxic chemicals.”

– David Suzuki²



Does it Make Sense to Sacrifice Wellbeing for Money?

How one looks at public health and the environment varies greatly depending on whether one focuses on economic growth or on wellbeing. According to the economic growth model, wealthier societies have the resources to provide better health care and better living conditions for their citizens. Wealthier societies also have the motivation and resources to preserve the environment. Poorer societies, on the other hand, are struggling for survival and so cannot afford to worry about health or their natural surroundings.ⁱ Make money first, this conventional view argues, and the rest will take care of itself. Unfortunately, this view promotes comfort for those who already have it and dangerous procrastination for everyone else.

Can we have prosperity if people and the environment are not healthy?

An estimated one and a quarter million people around the world die each year as a result of traffic crashes; an additional twenty to fifty million suffer non-fatal

ⁱ According to something called the ‘Kuznets environmental curve’, economic growth will eventually lead to concern for the environment. As people gain material wealth, they start to show concern for clean air and water and for attractive environments, and to believe in the importance of standing forests and of preserving wildlife and their habitats. Thus, this model suggests, if one can simply nurture growth in per capita income then environmentalism will follow suit. But that process of gaining enough wealth to care about the environment can take decades or even centuries, by which time there might not be much of anything left to save. Kahn points out that there are shortcuts wherein an active civil society can raise demand for environmental protections even where per capita incomes are extremely low. See Matthew E Kahn, *Green Cities, Urban Growth and the Environment* (Washington, DC: Brookings Institution Press, 2006).

injuries, including lifetime disability. Internationally, for those aged fifteen to twenty-nine, years, traffic injuries are the leading cause of death.³ Diseases directly linked to air pollution are another leading cause of premature death, responsible for more than three million early deaths annually.⁴ That number was 800,000 just a decade earlier. For the first time, air pollution ranks in the world's top ten list of causes of death.⁵

More driving and higher speeds mean more crashes, worse air pollution, and less physical activity; wider roads mean less space for farmland and green space. Yet when it comes to the choice between promoting transport systems that would reduce driving (focusing on trains, light rail, good infrastructure for walking and cycling, and policies that make driving more costly) or promoting the use of cars (building more roads, widening existing ones, adding more flyovers and elevated expressways), transport planners and funders opt for the latter. They claim that economic growth requires more infrastructure for cars and trucks rather than for people. There is, they say, a necessary trade-off between the economic benefits of roads and their negative consequences.ⁱⁱ Similarly, every mine, every polluting industry, and every attempt to resist improved workplace safety is justified based on economics; illness and death are simply the price of doing business ('collateral damage' is another phrase often used). Damage to health and the environment is justified as long as it contributes to prosperity; attempts to protect health and the environment are unwarranted brakes on economic progress.

In order to make the case for protecting health despite the economic incentives to create conditions that worsen it, researchers have carried out a number of studies to estimate the economic costs of disease, disability, and environmental pollution – and the benefits of a radically different approach. Here are some of the results:

- ❑ Asthma is the fourth leading cause of work absenteeism among American adults. Nearly fifteen million workdays are lost or are less productive due to asthma attacks in workers. As a result, asthma leads to \$18 billion in direct costs in the United States alone: \$10 billion for hospitalization and \$8 billion for lost earnings due to disease or death.⁶
- ❑ Air pollution in China cost the economy an estimated \$112 billion in 2005.⁷
- ❑ The direct and indirect costs of overweight and obesity in Australia were estimated at \$56.6 billion in 2005.⁸ The cost of treating obesity in the United States for one year is about \$147 billion.⁹

ⁱⁱ Among other places, I heard this argument repeatedly at the ADB Transport Forum, which was supposedly focused on *sustainable* transport. ADB Transport Forum, Manila, 15-19 September 2014.

- ❑ The health consequences of tobacco use in the United States cost more than \$289 billion each year: at least \$133 billion in direct medical care costs for adults and more than \$156 billion in lost productivity.¹⁰
- ❑ Traffic crashes worldwide resulted in an estimated economic cost of \$518 billion in the year 2000.¹¹
- ❑ More than \$100 trillion in public and private spending could be saved by 2050 if there were a global expansion of public transportation, walking, and cycling in cities.¹²

The fact that the case for health and the environment needs to make use of economic costs is frustrating. If some form of Gross National Wellbeing were the common measure rather than GDP, their importance would be self-evident. Meanwhile, despite the availability of statistics like those above, the importance of promoting a healthy environment still has not made its way into mainstream economics. As James Robertson, writer and speaker on economic and social change, remarks, "The idea that the development of healthier people, and the creation of a social and physical environment which enables people to be healthy, might be treated as productive investment in a society's capital assets, as the development of its most important resources (its people) is alien to conventional economics."¹³ Even more alien is the idea that people are valuable simply because they are human.

The importance of the environment to human wellbeing should also transcend monetary figures. In his film *An Inconvenient Truth*, former United States vice president Al Gore displays a scale that weighs gold bars against the earth. Yes, the gold bars look tempting, but it obviously makes no sense to sacrifice our planet for them. One cannot destroy the environment and then buy one's way out of the destruction. Yet, while people may acknowledge the need to save the environment in a general sense, for any single decision they typically view 'the economy' as more important. People have already sacrificed much for the economy, why not a little more? It is not possible to return to a pristine state of nature. It is no easy matter to decide how much of one's comfortable lifestyle (for those who have one) and ambition to live better, in a material sense, one should sacrifice to avoid doing a little more damage to the planet.

But it is unwise to forget Gore's scale entirely. Economic growth, as measured by growth in GDP, necessarily takes a toll on the environment. This includes climate change that scientists have tied to all the carbon dioxide and methane generated from transport, industry, and livestock. It includes environmental damage that results from paving over the countryside to make space for industry. It results

from the continuous building of more roads and highways. It results from power plants that generate power in environmentally damaging ways, and from the creation of ever greater amounts of waste. These are not trivial concerns that we can postpone to a future day when countries will be better able to afford to address them. The environment affects people's health and overall wellbeing *today*. It is not a separate entity; it is the space that people inhabit. It is not that people should save the environment out of a sense of goodwill or charity; it is the environment that enables life to exist on the planet.

I face these issues almost daily in my career. The low importance given to public health affects everything that I try to do.ⁱⁱⁱ People working on tobacco control are told that reductions in tobacco use will harm national economies. It is difficult to raise the possibility of restricting the promotion of soft drinks and fast food, so large and powerful is the industry that profits from their sale. According to the Federal Trade Commission, American food companies spent nearly \$2.3 billion on advertising and promotions targeting children in 2006.¹⁴ While some progress is occurring in the United States on calling attention to the problematic nature of offering children's games in fast food meal packages and seeking to restrict them, the latest government measures on this issue are only voluntary. Anyone who dares to suggest that measures should be implemented to reduce the use of and need for automobiles in cities is likely to become the target of ridicule. People are encouraged to defend their 'right' to respond to advertising by shopping, yet it is somehow unpatriotic to call for measures that would protect people's health from the effects of those same ads. In most settings, money talks far more loudly than does health.

Wouldn't economic growth lead to better health outcomes?

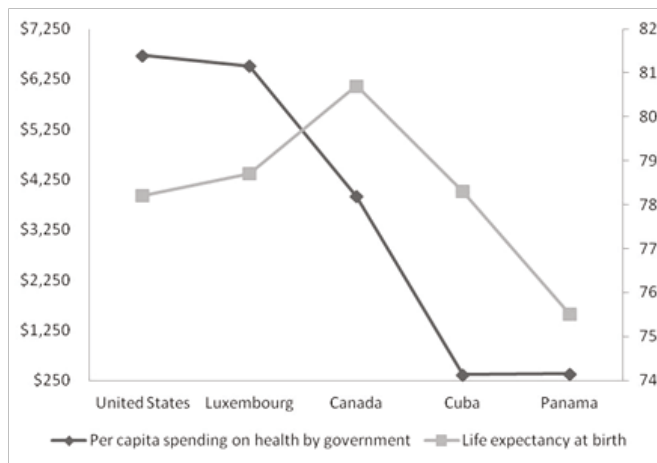
Wealthier individuals in any country, and wealthier countries overall, tend to have better overall health outcomes than do those with fewer material resources. This stems from, generally speaking, a combination of better living conditions and higher expenditures on health. However, there are enough exceptions to make it clear that low-consumption countries can do as well as the high-consumption

ⁱⁱⁱ That health (e.g. creating the conditions that allow an entire population to be healthy) is considered to be less important than medicine (treating individuals for their ailments) was obvious to me while I was getting my Masters degree. The Harvard School of Public Health had an unattractive campus, an ugly cafeteria that served bad food, and few amenities. The Harvard Medical School next door had gorgeous buildings, a beautiful cafeteria with good food, and a gym which the 'poor cousins' in the public health school were 'generously' allowed to use.

ones if they prioritize health rather than economic growth. The United States government spends \$3,076 per capita on health care; only a handful of countries spend more. In terms of total health spending (government plus individual), the United States spends \$6,719 per capita on health care, more than almost any other country and surpassing other big spender countries such as Luxembourg and Monaco. In terms of life expectancy, however, the United States does far worse than many other countries. High-consumption countries that spend less on health than the United States, but whose governments provide health care directly, do better because they do not need to support a bloated insurance bureaucracy. Canada, for instance, spends fifty-eight percent of what the United States does on health but has two and one half more years of life expectancy, thanks to a more socialized system of health care delivery. Cuba excels in terms of health outcomes; its life expectancy is higher than that in the United States, and yet it spends less than six percent of what the United States does on health care. These comparisons are shown in Figure 6.¹⁵

Other low-consumption countries with socialized systems of health care delivery – including Sri Lanka, Costa Rica, and Vietnam – have, like Cuba, achieved high levels of health. But Cuba is the extreme case. Even the World Bank paints a rather rosy picture of Cuba: one hundred percent literacy, a life expectancy at birth of 79 years, and less than two percent unemployment.¹⁶ (Where Cuba performs less well is in maternal mortality, though its rate is still considered ‘low’.¹⁷)

Figure 6: National Comparisons of Per Capita Health Expenditure and Life Expectancy



Treating health as a commodity rather than as a human right that should be available to all, regardless of ability to pay, is a market-based approach that is more conducive to GDP growth than it is to improved wellbeing. It is important to keep in mind the lack of a direct connection between wealth and health when deciding whether to develop one's economy by increasing industry, expanding mining, or engaging in various other practices that, while contributing to GDP and possibly generating jobs, also harm the environment. It is probably preferable to work in a coalmine than to starve, but that is not necessarily the real choice that people face. Because pollution is causing an increasing number of deaths, it needs to be seen as a real threat to health, rather than as a minor inconvenience.

Finally, it is helpful to remember who benefits from the economic growth promoted at the cost of health and the environment, and who suffers most from the damage. It is easy for the rich and powerful to disregard the natural environment when they feel safely ensconced in the artificial one that they have created with their wealth; not so for those who must live in a degraded environment.

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Self-interest is a great motivator. When the wealthy create their own systems of health care, education, security, transport, and so on, they have no incentive to work to improve the public system that others have no choice but to utilize. At a discussion of the extremely poor conditions for pedestrians in Manila, I asked a senior sustainable transport specialist at the Asian Development Bank whether he would be more motivated to work to improve walking conditions if he walked the kilometre to work rather than using his car. "Yes," he replied. The rich opt out; the poor are left to suffer.

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Medical care and medicine for the highest bidder

An important part of the 'recipe' for economic growth is the privatization of basic services, including health care. Many people also argue that health care is better left to private companies whose need to make money will 'ensure' that it is of good quality. Although health is, of course, about much more than medical care, the type of care that is accessible is critically important. When medical care is privatized, it becomes unaffordable to the poor. There can thus be a direct trade-off rather than a convergence between economic prosperity and wellbeing. GDP can increase while the poor have less, rather than more, access to good health services (as well as to a good environment and other conditions that they need to stay healthy). In Paul Farmer's words,

A preferential option for the poor, and all perspectives rooted in it, also offers a way out of the impasse in which many of us caregivers now find ourselves: selling our wares and services only to those who can afford them, rather than making sure that

they reach those who need them most. Allowing 'market forces' to sculpt the outlines of modern medicine will mean that these unwelcome trends will continue until we are forced to conclude that even the practice of medicine can constitute a human rights abuse.¹⁸

The responsibility of the physician goes far beyond simply serving those who can afford her services. When a physician limits her practice to those patients who can afford to pay and ignores the needs of the poor, she is herself, argues Farmer, guilty of human rights abuse: she is in the position to deliver health care to those in need but refuses to do so.

The idea of forcing users to pay for health care rather than making it a provision of the government is bad economics because it will increase poor health. The opposite is also true: experience in Nepal, for instance, found a doubling or more in use of medical services when provided at no cost instead of at even nominal fees.¹⁹ If health and wellbeing are important, then economic arguments are secondary: it makes no sense to save money by denying access to basic health services.

If treating illness is a lucrative business, then those in the health care business will have no incentive to support public health measures that create healthier populations. Many governments simply ignore the whole issue of disease prevention. The recently passed Bangladesh health policy, under debate for years, did not mention prevention at all until my colleagues lobbied heavily for its inclusion. The revised version, though far from perfect, does give importance to government's role not only in *treating* disease, but also in *preventing* it.^{iv} The dentist that I visit in Bangkok also runs a snack stand that sells exclusively sweet items: a mouth-watering assortment of cakes, biscuits, and sweetened coffee. This makes good business sense: make money by selling sweets and again by fixing the damage caused by those sweets. Private hospitals in Bangkok typically have fast food chains in their lobbies. The practice is widespread when profits are allowed to trump health, including in the United Kingdom.²⁰ How likely are doctors who work in hospitals that make money from selling unhealthy foods to counsel their patients against eating them? How much weight (excuse the pun) does such advice carry when the fast food industry and hospitals are seen to be compatible business partners? Some pharmacies no longer sell cigarettes, but what message is

^{iv} Language in a policy, no matter how good, is of course not helpful if it does not lead to actual changes in practice. But the language is important because it gives activists a tool with which to push their cause, which is far more difficult when government policies completely ignore the issue.

given when they continue to sell potato chips, candy bars, and soft drinks?^v

The drive to maximize profits also leads private health services to treat as many patients over the course of the day as is possible. 'Extra' services such as counseling and other support to ensure a healthier population disappear because they are, in the short and long term, bad for business.

Focusing on economic growth rather than on wellbeing brings greater profits to government-subsidized pharmaceutical companies at the same time that inequality and suffering increase. Drug companies argue that they must maintain patents and high drug prices in order to recoup the investments that they have made in research and development (R&D) for new drugs. While this implies that the main goal of pharmaceutical R&D is to develop new drugs to improve health, the facts indicate that the real goal is to increase the profitability of the companies themselves. Of the more than one thousand new drugs approved by the United States Food and Drug Administration (FDA) between 1989 and 2000, only fifteen percent were highly innovative. Of the 137 new drugs under development in 2000, only one was for sleeping sickness,^{vi} one was for malaria, and none was for tuberculosis – all diseases that cause debility, suffering, and death for millions of people around the world every year.²¹ The reality is that nearly all pharmaceutical R&D focuses on drugs to treat an increasing number of lesser ailments that affect those who have the ability to pay for these drugs. Furthermore, although the American government often pays for much of the research through subsidies, research grants, and other means, it surrenders to the companies the patents to any drug that is developed. Even with new drugs, there may have been little by way of corporate R&D expense. Keeping drug prices high to fund R&D is thus a smoke screen; the real motive is profit.

In 2000, the pharmaceutical company Glaxo-Wellcome attempted to block the sale of cheaper generic AIDS drugs in Ghana, despite having made \$1.1 billion selling AIDS drugs during that same year. When the company finally offered a discount on its drugs, the Minister of Health of India reportedly responded with disdain that if pharmaceutical companies can afford to offer such large discounts, they surely must have been charging too much in the first place.²²

^v Recently, one pharmacy in Nova Scotia, Canada, made headlines when it announced that, as part of a move to sell healthier foods, it would stop selling soft drinks and other sugar-sweetened beverages. Graham's Blog, "Press Release: Soft Drinks and Sugary Beverages," <http://stonespharmasave.com/blog/?p=560>

^{vi} Sleeping Sickness is a tropical disease that, despite its benign nickname, causes headaches, pain, anaemia, kidney dysfunction, sleeping disorders, and in its more serious manifestation, mental deterioration and death.

The big pharmaceutical companies talk about ‘responsibility’ and ‘corporate giving.’ Under the sub-section of its website entitled “Health for All,” (found in the “Responsibility” section), Glaxo Smith-Kline^{vii} (GSK) talks about “How we are developing innovative products and improving access to healthcare for patients around the world” without mentioning affordability.²³ The company was blasted in the United Kingdom for making sizeable profits on a flu vaccine after charging the National Health Service six times what it had cost to make: the chief executive of GSK, Andrew Witty, admitted that the swine flu crisis was a “significant financial event [e.g. highly profitable] for the company.”²⁴

Companies can say what they will about their good behaviour; their actions speak otherwise. Pharmaceutical companies keep prices high enough to make substantial profits even in low-consumption countries. They refuse to allow even limited suspension of their patents so that those countries could produce generic versions of essential drugs for local use at very low cost, even where those drugs are needed to save the lives of millions of people. These are not companies operating on the brink of profitability for which such measures would lead to bankruptcy. Pfizer, for instance, recorded first quarter revenues in 2010 of \$16.8 billion.²⁵ The same observations hold true with many other private sector companies that provide health and medical services. The profitability of the corporations involved in the provision of health care directly opposes the public’s need for low-cost essential medicines and other health and medical services. Providing such services to the highest bidder will increase economic growth and GDP; what it will not do is improve human wellbeing. And without human wellbeing, what does economic growth matter?

Whose health matters the most?

Diseases do not affect all parts of a population equally; some diseases, like tuberculosis and AIDS, disproportionately affect the poor and other disaffected populations. Government policies can determine the degree to which vulnerable groups are protected from – or are made more susceptible to – disease outbreaks. Multi-drug and extremely drug resistant tuberculosis (MDR and XDR TB), for example, tend to be especially rampant among prison populations due to over-crowding. Therefore, the higher the incarceration rates, the greater the likelihood that the disease will spread within the prison population, which itself is mostly poor.

^{vii} This is the name that Glaxo-Wellcome took following its merger with SmithKline Beecham in 2000.

The results of the ‘criminalization of poverty’ by which governments incarcerate rather than help many of the poor, combined with the privatization of hospitals, played out in notable fashion in the major epidemic of MDR TB that broke out in New York City between 1978 and 1992. Tuberculosis rates nearly tripled over that time, and rates of MDR TB more than doubled. The greatest numbers of cases were located in the poorest parts of the city, in neighbourhoods with large immigrant populations, in prisons, and among the homeless.^{viii} The case rate in central Harlem – at 222 per 100,000 people – was higher than that found in many low-consumption countries.²⁶ Most of those who fell ill were young adults (aged fifteen to twenty-four) and non-white: fifty percent were black, twenty-six percent Hispanic, and thirty-eight percent were HIV-infected.²⁷ According to the authors of a study published by the Centers for Disease Control and Prevention, “The loss of government funding of TB programs in the 1970s and 1980s in New York City made access to treatment more difficult for poorer sectors of the population (often non-white patients), likely contributing to increases in disease in these groups.”²⁸

As the authors further note, “During the early part of the TB epidemic in New York City, TB control was underfunded and highly fragmented.” Budget cuts for MDR TB programs in the 1980s led to savings of about \$200 million. The government only took the disease seriously when it began to spread beyond poor prisoners and minorities and into the general population. By that time, the cost of addressing the epidemic was over one billion dollars and predicted to exceed that amount.²⁹ The costs in financial terms were astounding; in terms of damage to health and wellbeing, they were incalculable. This problem is by no means limited to the United States: Russian prisons have had, at least historically, notoriously high rates of MDR TB. For many Russians, a short jail term can mean a death sentence.³⁰

Cutting corners when facing an epidemic is bad economics, since the cost of addressing the crisis exceeds the cost of preventing it in the first place. Bad health is bad economics, since people are less productive when they are sick. Beyond all the numbers is the simple question of what is valued. Governments tend to run short of funds when it comes to investing in the poor. Yet they have plenty of money to spend on weapons. Isn’t it about time that we put people, including the poor, first?

^{viii} Outbreaks also occurred in many hospitals, with a fatality rate of over eighty percent; some health care workers died after contracting the disease, which inevitably spread from poor to other segments of society.

Corporate prosperity harms health and the environment

Why does mainstream economics tend to ignore the importance of the environment and health? Speaking at the Eighth Global Conference on Health Promotion in Helsinki, Finland, Dr. Margaret Chan, Director-General of WHO made strong statements about the growing contradiction between prosperity as conventionally measured and good health. Economic growth, modernization, and urbanization have actually fostered unhealthy lifestyles, she noted, and those who seek to improve public health face opposition from forces that are “not so friendly.” There is a direct conflict between the interests of big business and those of health, said Dr. Chan: “Market power readily translates into political power. Few Governments prioritize health over big business.”³¹

It has taken an enormous amount of effort and expense to begin to limit the power of the tobacco industry. Internationally, the advocacy efforts are now starting to broaden from tobacco alone to the overall epidemic of non-communicable disease (NCD). Industry is directly responsible for promoting the four major NCD risk factors: tobacco use, excessive alcohol use, unhealthy diets, and insufficient physical activity.³² As Dr. Chan pointed out during her talk in Helsinki, “It is not just Big Tobacco anymore. Public health must also contend with Big Food, Big Soda, and Big Alcohol. All of these industries fear regulation, and protect themselves by using the same tactics.”³³ Added to this must be Big Transport, which supports extremely expensive investments in car-based infrastructure to the detriment of health, the environment, and the economy.

The single largest source of calories in the American diet is carbonated soft drinks.³⁴ An eleven-ounce (325ml) soft drink contains about ten teaspoons (49ml) of sugar.³⁵ A study of more than 90,000 women found that those who consumed just a single serving a day of a soft drink or commercial fruit juice had almost twice the rate of type 2 diabetes than did those who rarely consumed such sweetened drinks.³⁶ Health advocates have responded to this correlation by trying to limit the affordability and attractiveness of these beverages. They have tried to limit portion sizes sold in New York City (an attempt that failed). They have pushed for a special tax on sugar-sweetened drinks (which have succeeded in Mexico and Berkeley, California).

As anticipated, the food and beverage industry has consistently countered those efforts. According to the American Beverage Association’s (ABA) web page on obesity, “All of our industry’s beverages can be enjoyed as part of a balanced lifestyle.”³⁷ Nor is the industry silent on the subject of possible regulation. In a script taken directly from the tobacco industry, the ABA runs a blog with categories including “Americans Against Food Taxes” and “Americans For Food and

Beverage Choice.”³⁸ The bogeymen of the ‘nanny state’ and ‘health Nazism’ are familiar to those working on tobacco control, and it comes as little surprise to see them being resurrected by other industries: a typical article calls a proposed tax on sugar-sweetened beverages “coercive” and “nanny-state-like”.³⁹ Another refers to “health Nazis” wanting to tax sugar.⁴⁰ Every single success must involve overcoming these well-funded voices of opposition, because every gain for health is a loss to industry.

What is true of health is also true of the environment; the focus on economic growth means that governments often fail to take seriously the environmental catastrophes caused by industry and instead wink at corporate violations of whatever regulations do exist. When industrial growth is always regarded as being more important than a clean environment, the damage that ensues is ignored. Ignoring it does not make it go away. Industry is far more generous about sharing the damage it creates than it is about sharing the profits such damage generates – what Paul Krugman calls privatizing gains and socializing losses. The mess industry creates is left for everyone else to clean up or suffer in. A recent example is British Petroleum’s (BP) handling of the disastrous oil spill in the Gulf of Mexico, a spill caused by its own negligence and by its successful lobbying of the American government to prevent the enforcement of reasonable safety measures. According to *The New York Times*, regulators had been warning offshore rig operators for more than a decade of the need for stronger safety measures. There was nothing new about the accident in the Gulf except its size: between 2001 and 2007, there were, according to the *Times*, 1,443 serious drilling accidents, “Yet the federal agency continues to allow the industry largely to police itself.”⁴¹ BP also lobbied against stricter regulations: “Last year,” the *Times* article notes,

BP, the owner of the well that blew up in the Gulf, teamed with other offshore operators to oppose a proposed rule that would have required stricter safety and environmental standards and more frequent inspections. BP said that ‘extensive, prescriptive’ regulations were not needed for offshore drilling, and urged the minerals service to allow operators to define the steps they would take to ensure safety largely on their own.

Industries lobby, governments listen, and the environment and the public suffer.

Corporate-owned mainstream media contributes to the problem by encouraging people to be unconcerned about the health of people or of the planet and by portraying corporations as good global citizens seeking to improve the state of both. The behaviour of corporations leaves no choice: to prioritize healthy people and a flourishing environment over the growth of GDP and corporate profit, a number of measures will be needed to rein in corporate activities.

Why don't economic incentives work to preserve health, the environment, and the natural resource base?

In the laissez-faire, everything-works-out-for-the-best-as-long-as-government-doesn't-interfere model of mainstream economics, people will make rational decisions when choosing between financial gains and the harm that such gains may bring about. In terms of health, this model asserts, people will only accept pollution and disease until they have enough money to afford to mitigate them or to find less polluting, disease-causing ways to earn more wealth. A low-income society will thus continue to accept polluting industry until it becomes rich enough to move the dirtiest factories to a poorer region and let others suffer from the health problems that such factories cause. The poor will dump raw sewage and chemicals into water bodies; the rich will be too keen to swim to do so.

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Is it rational to pollute low-consumption countries further? In what has become a famous memo, in 1991 an internal World Bank document undersigned by Larry Summers, then chief economist, put forth the 'logic' of transferring waste and dirty industries from industrialized to low-consumption countries. Since the World Bank measures human life in terms of its earning potential, and since those in low-consumption countries earn less than those in high-consumption countries, Summers deemed it to make economic sense to shift pollution and other sources of early death to countries in which human life was seen to be worth little. "Just between you and me, shouldn't the World Bank be encouraging more migration of the dirty industries to the LDCs [less developed countries]?" asked the memo. "I think the economic logic behind dumping a load of toxic waste in the lowest wage country is impeccable and we should face up to that. ... I've always thought that underpopulated countries in Africa are vastly under polluted; their air quality is vastly inefficiently low [sic] compared to Los Angeles or Mexico City." Summers later stated that he meant the memo to be ironic or as a thought experiment. However, according to Robert Weissman, president of the American NGO Public Citizen, Summers has apparently "never explained ... how he disagreed with the memo's 'impeccable,' if ironic, logic. Indeed, that kind of logic has guided World Bank policy for decades, as it has pushed deregulation, privatization and corporate globalization, with horrific results."⁴²

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A similar process, claim mainstream economists, works to prevent resource depletion. As resources become more and more rare, their prices go up, which will lead to less use; as such, there will never be a genuine problem of depletion. If resources remain (somewhat) affordable, then obviously there is still a sufficiently abundant supply of them and no need to conserve. In fact, however, resources are

not affordable. The prices of many natural resources have increased dramatically, and the soaring price of food that led to riots in many countries – and possibly contributed to the Arab Spring⁴³ – likely stemmed in part from a spike in oil prices, since the growing and distribution of food is so dependent on oil.^{ix} As to why oil is not even more expensive, many factors contribute to determining its price. One is political insecurity in major oil-producing countries. Another is the need to keep customers addicted to the product so that they do not invest resources in other, renewable sources or find ways to get by on less. When the price of oil rises too high, people cannot afford to buy it and so sales decline. If prices remain too high, or if prices increase in sudden spurts, countries would presumably shift to less energy-intensive ways of doing business. The price therefore needs to be kept high – but not *too* high.^x

During the oil crisis of the 1970s, American President Jimmy Carter suggested that people wear sweaters indoors to reduce their need to use heating oil. When the Soviet Union collapsed and Cuba could no longer get cheap oil, the use of bicycles greatly expanded. In both cases, oil industry supporters ridiculed the suggested use of alternatives – sweaters and bicycles – as being unnecessary and harmful to economic growth. More typically, governments respond to price hikes by providing subsidies which shield consumers from the ‘signal’ they would otherwise receive from price hikes. Not only do such subsidies distort consumer behaviour (by not allowing them to respond to the real price), but they increase debt and lead to chronic fund shortages.^{xi} Certainly, governments should subsidize the poor, but while fuel subsidies may keep bus fares from going up, they give the most benefit to the rich in their private cars. Indonesia, for example, spent about \$20 billion on fuel subsidies in 2012, and the projected subsidies for fuel and electricity in 2013 were about \$32 billion, twenty percent of the total government budget. That figure

^{ix} Other reasons for high food prices include climate change and soil depletion because of industrial agriculture. See Nafeez Ahmed, “Why Food Riots are Likely to Become the New Normal,” *The Guardian Earth Insight* blog, 6 March 2013.

^x The price is in fact too high, but like the frog that boils to death gradually without noticing, so gradual increases in price have prevented many from noticing how unaffordable fuel actually is. The historic relationship between high oil prices and recession/depression tends to be ignored. See Richard Heinberg, *The End of Growth: Adapting to Our New Economic Reality* (Gabriola Island, BC, Canada: New Society Publishers, 2011).

^{xi} This is one of the few places where I agree with the World Bank and some mainstream economists – except that I think that the poor should be protected from the harm of price increases by receiving subsidies elsewhere in the economy.

exceeds what the government spends on capital expenditures^{xii} and social programs *combined*.⁴⁴ Horrific traffic jams in Jakarta are, in a sense, directly subsidized by the government through low fuel prices. Such subsidies fail to allow people to respond to the price shock of oil hikes and divert government resources from building a better transport system that would require less fuel to run. If governments really wanted to protect the poor from high costs, they would simply subsidize buses directly, with the agreement that the companies would not increase the fares. They would also introduce congestion charges and parking fees to make car use more expensive, and use the revenues to improve further the situation for pedestrians and cyclists, generating a positive cycle and reducing dependence on fuel.

The combination of political tactics of oil-producing countries and government subsidies in importing countries prevent a rational response to price hikes, even where due to declining supply. Similar processes prevent people from responding in rational ways to poor health and a deteriorating environment. If the wealthy can opt out of the poor conditions they create by living in less polluted environments or by moving polluting factories to low-consumption countries, then they have no incentive to reduce pollution. If they can afford to protect their own health, then they have no incentive to reduce corporate profits in order to protect the health of others. If they are profiting from local resource booms, they can ignore, according to Canadian writer Allan Casey, "the inconvenient truth of poverty amid oil wells and mines."⁴⁵ Ever-greater inequality means that there is an increasingly two-tiered system in which those who profit fail to pay for the consequences of the wealth that they enjoy, while those who struggle to survive are virtually powerless to shift attention from economic growth to the preservation of health, the environment, and natural resources.

Technology as a shortcut

If market forces alone are not enough to protect health and the environment, what about technology, which has achieved amazing results over the past few decades and particularly the past few years? Mainstream economists and their followers claim that it is possible to have it all: that technology will save the environment without people having to change their lifestyles. To some, this thought is appealing. If the river floods, dam it. If fresh water becomes a growing problem as glaciers disappear, desalinate salt water, which is in abundant supply. If cars

^{xii} Capital expenditure refers to money spent on items used repeatedly in providing goods or services such as building a hospital or roads, or purchasing equipment. The contrast is with current expenditures, which are for quickly used items such as drugs, stationery, etc.

pollute, run them on biofuel. Call me a Luddite^{xiii} if you will, but it seems that each technological solution brings new problems in its wake. It is a bit like the patient who needs drugs to deal with the side effects of her other medications.

Dams provide electricity, water, and some measure of flood control. They also displace millions of people and completely distort the environment. The water collected in reservoirs, which is often full of plants from the flooding of the pre-existing area, is a serious source of gases that contribute to climate change.⁴⁶ Desalinating salt water is costly, in terms of both money and the fuel required. Biofuel can be a net loss, given the amount of conventional fuel that is needed to grow, harvest, and transport the vegetable components of which it is made (chemical fertilizers are petroleum-based, and farmers these days tend to use tractors rather than oxen). Growing of corn and other components of biofuel also takes land away from food crops for people, thereby exacerbating rising food prices and world hunger. Cars were envisioned as a wonderful technology to free people from the horse and buggy and to allow residents to escape polluted, congested cities; television was meant to expand people's horizons and provide them with wonderful sources of information. There was once a belief that nuclear weaponry would make the world safer, as nobody would dare to start a war given the potentially disastrous global consequences. Human arrogance can lead us into dangerous territory, suggesting that people can overpower nature or rewire the world to suit their needs. The tsunami that devastated several Asian countries and part of Somalia in 2004, hurricane Katrina in the American city of New Orleans in 2005, the tsunami in Japan in 2011, and other extreme weather events are reminders of how powerless humankind remains in many circumstances, no matter how advanced its technology. Technology can make people's lives better in many ways, but it cannot rewrite the fundamental rules of life, including that non-renewable resources are limited and that pollution has deadly consequences.



^{xiii} The term 'Luddite' originally referred to British workers in the early 1800s who destroyed labour-saving machinery in protest of its introduction, knowing their livelihoods were threatened. More broadly, it refers to anyone who is opposed to change, especially technological change. The term is commonly used to put down those who do not believe that technology can provide miraculous solutions to the woes that, often, technology itself has caused.

Towards a Better Way: Prioritizing Health and the Environment

“Medical education does not exist to provide students with a way of making a living, but to ensure the health of the community.”

– Rudolf Virchow, one of the founders of social medicine

* * *

Healthier people are better able to take care of themselves and their families; they lead better lives. The planet sustains humanity; a healthier environment means healthier people. When wellbeing is the priority, it is obvious that health and the environment are more important than money. Regulations imposed and money spent to preserve and improve health and the environment is a net benefit and an investment, not a cost. Money is of very little use to someone if it obtained at the price of that person’s health. Economic and health policies would look very different if people felt that it is illness, not health, which is unaffordable. It is time to reject any definition of prosperity that posits unhealthy people living on a sick planet, even if it also posits an abundance of material goods mostly accumulating in the hands of a few.

The need for more and wiser government investments

It is possible to overcome the opposition of a tremendously rich and powerful corporation. Successes in tobacco control illustrate the possibilities. The success of a decades-long campaign to ban Nestlé’s marketing of infant breast milk formula is another example.^{xiv} But corporations are by no means the only culprits in the poor state of public health and the environment. In too many countries, governments focus on subsidizing industry and giant corporations and fail to invest in the basic needs of their citizens. They ignore the fact that the social determinants of health include housing quality, education level, and (to some extent) income. When they do fund health, governments tend to focus on big hospitals in cities rather than on easily accessible primary health care centres throughout the country. When the focus is on treatment, prevention is ignored.

If activists succeed at convincing governments to prioritize health instead of economic growth, then more government funding will be available for appropriate and accessible health care services, particularly at the primary care level, as

^{xiv} As one of the main people involved in the original Nestlé campaign points out, the Swiss company is still involved in causing disease and death – but this time through its promotion of unhealthy foods. See Mike Muller, “Nestlé Baby Milk Scandal Has Grown up but Not Gone Away,” *The Guardian*, 13 February 2013.

well as for a range of measures meant to increase the population's health overall. Health is of great value to people; people bankrupt themselves spending large amounts of money to treat disease. Governments could thus improve people's *financial* status as well as their health by reducing their need to make personal expenditures on health care; prevention efforts would also save governments money in the medium and long term. For example, it is far cheaper to supplement the diets of pregnant women than to take care of premature infants. As Ryan Meili explains in his 2012 book *A Health Society*, democracy itself could be revitalized by making health outcomes the underpinning of all government policy.⁴⁷ Nor should concern about economics serve as an excuse for further deterioration of the environment. Any short-term gains made by those polluting the environment are more than offset by long-term costs for everyone.

A focus on wellbeing would also help activists to convince governments to make bigger investments in education, with an emphasis on primary education for the most disadvantaged groups. Educational levels are related to a range of health issues, with not only the more prosperous but also the better educated segments of the population tending to do better in a number of ways. Women with less education are less likely to use preventive services and are more likely to have poor health status.⁴⁸ A review of data from twenty-two low-consumption countries found that women with higher education levels are more likely to get their children vaccinated.⁴⁹ Investing in education, especially for women, is likely to help improve family health and may result in fewer births. Educated societies are healthy societies.

Comprehensive health policy – which in turn needs to be part of a broader approach that makes health a key component of all policies – should address prevention as well as treatment and should treat health as a basic right for all rather than as a commodity to be purchased by the few. Viewed holistically, health is not just about providing treatment for disease; it is also about facilitating healthy lifestyles through the built environment and through other policies that enable people to have decent housing, safe jobs, sufficient economic support to be able to afford the basics, and access to healthy foods and pleasant and safe environments for physical activity. The conditions that are necessary for people to stay healthy in the first place should be put in place: better jobs, income supports, controls on pollution, and improved infrastructure and services that are used by the poor. Activists need to support policies that restrict the affordability, attractiveness, and availability of health-harming substances such as cars, fuel, TV, tobacco, sugar-sweetened beverages and other calorie-dense, low-nutrient foods, and

excessive alcohol.^{xv} Activists must address the dumping of hazardous substances. Where governments fail to monitor and publicize pollutant levels, groups need to push them to do so, and to take effective action to reduce them.

* * *

***Universally accessible design: can we afford not to have it?** Designing buildings and transport so that they are accessible to everyone – including the blind, deaf, those in wheelchairs, those on crutches, the elderly, and all those with some sort of sensory or physical limitation – is often seen as an unaffordable cost. Designing for those living with disabilities is vastly cheaper (sometimes no additional expense at all) than retrofitting buildings and transport to accommodate them.⁵⁰ Where retrofitting is needed, the costs need to be balanced against the costs, both economic and opportunity, of denying those with disabilities the chance to be fully participating members of society. More than one in seven people worldwide have some sort of disability. Poverty increases the risk of disability, and disability leads to poverty when job opportunities are inaccessible.⁵¹*

The question is about much more than cost-benefit analysis. As Adolf Ratzka, Founder and Director of the Institute on Independent Living in Sweden comments, “Although I am an economist by training, I have difficulties in using economic arguments when it comes to such basic human rights as freedom of movement and the right to participate in society on equal terms. Human and civil rights cannot be expressed in dollars and cents. If our countries can afford to invest billions in the most sophisticated weapons to kill and disable other human beings, then our governments surely have enough money to invest in a barrier free society, a more democratic and human society for all.”⁵²

* * *

Government investment should also support a return to traditional farming methods. Governments need to put and an end to highly profitable, highly polluting Concentrated Animal Feeding Operations (CAFOs). CAFOs are morally abhorrent in the way that they treat the animals, but they also impose an enormous cost in terms of releasing climate change-inducing methane into the atmosphere and tremendous amounts of contaminated fecal waste into the groundwater. Chemical-based industrial agriculture also contributes to pollution, leaking petroleum-based fertilizers as well as dangerous insecticides and other chemicals into the world’s waterways. Sadly, and as a direct result of policy rather than prac-

^{xv} Policy measures include higher taxes, better labelling, and bans on advertising, sponsorship, and promotion, among other measures. Ad bans do not cost much to implement, and higher taxes mean higher government revenues as well as a shift in expenditures away from harmful products. But even measures that would cost the government money to implement should be viewed as an investment, not an expense or loss, if they can improve health and the physical environment.

ticality, junk food in the United States has become cheaper than healthy food.^{xvi} Agricultural subsidies in the United States favour crops such as corn and soybeans that are key ingredients in fast food, soft drinks, and animal feed. Fresh fruits and vegetables for direct consumption receive no such subsidies.⁵³ Nor is information about healthy diets easy to come by. In some poor neighbourhoods, food choices are even worse: fast food outlets completely dominate the food scene and fresh produce is a rarity.⁵⁴ As Barbara Kingsolver points out, “In our daily fare, even in school lunches, we broadly justify consumption of tallow-fried animal pulp on the grounds that it’s cheaper than whole grains, fresh vegetables, hormone-free dairy, and such.”⁵⁵ There is something bizarre about a country as wealthy as the United States cutting the budget for school-based food programs, debating if ketchup is a vegetable, and feeling that it is acceptable to feed substandard food to children.^{xvii}

If governments took a longer-term view of the costs and benefits of the policies that they were enacting, if they prioritized health and the environment instead of economic growth, then the fallacies of mainstream economics would become clear. It is a sure indication that an economic system is ‘sick’ when it fails to give priority to health or to the ability to sustain life on the planet.

An all-of-government approach

One of the reasons that it has been so difficult to make health a priority is that governments are not a single, monolithic unit, any more than the poor are a homogeneous group. Different sectors of the government commonly work in direct opposition to each other, and the department or ministry that is responsible for health is typically far weaker than are the agencies that oversee finance, industry, and trade. Because human health is not a government-wide priority – while ‘economic health’ usually is – one government agency’s policies and programs may essentially create or foster the very health problems that other agencies are then expected to address. The Ministry of Industry, for example, encourages polluting industries, and the vastly weaker Ministries of Health and Environment become responsible for the resulting problems. The Ministries of Finance and

^{xvi} This is true elsewhere as well. In Nepal the cheapest snack is not a piece of fresh fruit but rather packaged, broken noodles with artificial flavourings. In Bangladesh, tobacco can be purchased for less money than any food item.

^{xvii} When I volunteered at the Boston Food Bank, which collects food that cannot be sold from grocery stores and distributes it to the poor via social workers, I received training to check cans to see whether the food inside was safe to eat. I was told to accept bags of sugar even if torn open as long as no contamination was visible, because sugar was in such high demand. But we had to throw away all dog food, even if it arrived in good condition from the donating store, because by law the animal shelters could not accept it.

Agriculture may wish to support tobacco production because they see it as an economic benefit for farmers in terms of income and for the government in terms of tax revenues; when people become ill from using tobacco, the problem is shunted to the Ministry of Health.

Overcoming this economics versus wellbeing dichotomy will require that policy makers take a holistic approach to their investments, so that polluting industries, a frenzy of road building, and encouraging industry at the expense of the population will no longer seem sensible or acceptable. Government departments must work together to promote wellbeing, rather than each focusing on an issue that, on its own, is too narrow to guarantee genuine prosperity.

The World Health Organization (WHO) recognizes that "Economic sectors such as transport, agriculture, and housing have profound impacts on health. For instance, transport is a major factor in traffic injuries, air pollution, and noise. 'Healthy transport policies' can help reduce these risks, as well as promoting walking and cycling."⁵⁶ It has developed a tool^{xviii} to address this issue:

Health impact assessment (HIA) is a set of methods and tools designed to incorporate a health dimension in all public policy. By means of HIA, a policy, programme or plan may be evaluated for its potential effects on health. ... For it to be effective, HIA should involve all relevant stakeholders, including the affected population, and participants should be willing to question the value of programmes that are shown to have a negative impact on public health.⁵⁷

Economic decisions have health consequences, which in turn have economic consequences. Economic decision-making cannot continue without involving those whose obligation it is to improve health. It is time to promote whole-of-government decision-making that acknowledges the inter-relatedness of transport, industry, trade, agriculture, health, and the environment.

Choosing the environment and employment

Recognizing that jobs are important does not mean that people should always be ready to sacrifice the environment to create more jobs. To the accusation that one cares more about the environment than about the suffering unemployed, the correct response is not to back down, but rather to reply, "Actually, I care about

^{xviii} Public input is vital to environment and health impact assessments; they cannot be safely left to private companies. When I worked as a temporary secretary, I typed an environmental assessment report written by an engineering consulting firm for the American military. The report discussed whether a planned bomb test in the ocean would affect local marine life. The response of the highly-trained engineers: fish are smart enough to swim away.

both." Good jobs are jobs that are healthy for the people doing them and for the environment. People do not need to go along with the assumption that it is necessary to make a choice between jobs and economic prosperity on the one hand and human and environmental wellbeing on the other. That type of reductionist thinking has gotten us into the current mess; it will not get us out.

There are a number of ways to make existing jobs healthier. One is to improve and enforce workplace safety. Policies that mandate a shorter workweek (thirty-six or forty hours/week) would allow more people to be employed, with all people working fewer hours and thus having more time to pursue other activities that contribute to their and their families' wellbeing. Nor would such a shift cause any reduction in productivity; in fact, it would likely mean a gain. Workers are less productive and more accident-prone when they are tired, as happens if they regularly work more than forty hours a week. The shorter workweek would thus benefit not only employees, but employers as well.⁵⁸

Government policies should not favour large businesses over smaller ones, nor should they subsidize wealthy corporations to create substandard jobs. The current practice of subsidising employers through tax benefits and then having to provide food stamps and other benefits for its workers because the salaries they pay are too low to live on, is in fact a double subsidy to the corporation at the expense of the employees. McDonalds has created a website to explain to its fulltime workers how they can get by on the minimum wage that the company pays, by holding a second job and spending no money at all on food, clothing, or heating.⁵⁹ In the meantime, Don Thompson, the company's new CEO, receives a pay package of almost \$14 million. The average McDonalds employee would have to work one million hours to earn as much as Mr. Thompson.⁶⁰ The jobs created by the opening of a fast food restaurant or a big box store replace jobs that already existed in local shops, many of which go out of business when the behemoth comes to town. The question is not whether a policy will create jobs, but whether it will create *more* and *better* jobs than it replaces, or whether a better alternative, in terms of job quality and health and environmental effects, already exists.

Governments can support local, intensive industry and repair. In some countries, this includes making traditional fishing nets, baskets, and other products from natural materials. In reality, the exact opposite often occurs. In 2002, the Government of Bangladesh closed Adamjee Jute Mill in response to the World Bank's complaints about corrupt management at the firm and its insistence that the company be closed. The mill, which had been operating for more than fifty years, was the largest jute mill in the country. The jute it processed provided biodegradable local materials and generated employment for about 30,000 people.⁶¹ A recent article suggests that the mill will reopen, with 'modern machinery' and jobs for

5,720 people.⁶² Surely less draconian measures could have solved the corruption problem and saved employment. It is too late for Adamjee Jute Mill; there is still time to save other local, non-polluting industries.

How does one have both employment and a healthy environment? Policies that discourage employment by encouraging automation should be repealed, except in cases where such policies protect people from really awful jobs. Since payroll taxes and worker benefit schemes – including pension funds, health benefits, and vacation and sickness leave – can make it more expensive to hire workers than to replace them with machines, many companies opt for automation, particularly when they receive tax breaks for capital investments. What if those investments were subjected to tax rates that were high enough to make it less costly to hire people than to replace them with machines? This is particularly important in countries where unemployment rates are high. A range of policies could be developed and enacted to reward employers for hiring and to punish them for replacing people with machines. Any benefits to industry should, of course, only be proffered when the businesses pay at least a minimum wage; it makes no sense to subsidize companies to underpay their workers.

The environmental impact of the move to automation is direct. Machines require fuel to run, as well as having environmental costs in their creation and disposal. (People also require fuel to operate, but that is true whether they are employed or not.) Labour-intensive activities and techniques, on the other hand, typically replace fossil fuel with human input, generate more employment, and require less waste disposal, thus benefiting the environment. When the goal is to maximise employment rather than production, it is possible to choose *both* jobs and a healthy environment.

It would be interesting to know what the effect might be on a national economy of promoting economic policies that favour the environment and employment. Fortunately, there is already evidence from an 'experiment' conducted in the Netherlands between 1980 and 1983. (The work is old but the ideas are, if anything, more valid today than ever.) The experiment used computer models to compare different growth scenarios: two focusing on growth and production, and an alternative 'conservator-economy' strategy that focused on saving the environment and using less energy.⁶³ Measures used in the models included the accounting of goods and services produced as well as of: environmental 'goods' such as energy, natural resources, and plant and animal species; the safety of the future in terms of the environment and natural resources; the distribution of scarce goods or income; working conditions; the degree of free choice in terms of whether to

spend one's time working or in other ways; and leisure time.^{xix} Government agencies and a university calculated the results of the different scenarios. On the surface, the conserver-economy appeared less prosperous: compared to one that emphasised production, the conserver approach resulted in a lower GDP and less total income, agriculture, industry, and services. However, it did not cause a decline in employment, and it led to a significant increase in the share of income going to those doing the work. There were astonishingly large predicted decreases in various types of pollution. These are all estimates, but based on a detailed analysis of the various scenarios, vast improvements would occur through the implementation of a conserver-economy in terms of preservation of plant and animal species, emissions of various air pollutants, water pollution, solid waste, radioactive waste, burning of coal, changes to the landscape, and workers' incomes. Health and the environment clearly are not mutually exclusive with economic wellbeing – as long as we stop using GDP as our measure of progress.

For those used to living in a world of disposable products, it may be hard to imagine anything different. However, most of the world does not take consumption quite so much for granted as do Americans. In Dhaka, trash is often picked through a few times before it is collected. In many countries, the repair of various articles (electronics, shoes, bicycles) is a major source of income, as is the regeneration of 'garbage' into something useful. Nor will people's standard of living necessarily decline if they switch from several pairs of plastic sandals to one pair of repaired leather ones. The 'conserver-economy' acknowledges this. It focuses on: preventing pollution, saving energy, using more solar power, discouraging car use through parking fees and a ban on new garages/roads, etc., reducing the use of artificial fertilizers and pesticides and inducing a shift to smaller farms, promoting high density mixed use areas, and encouraging services such as repair shops and small retail shops.^{xx} This model provides employment and is good for the environment. The model also favours 'short-time working' to reduce unemployment (more people working fewer hours).

Surely, a small decline in monetary income in exchange for more equality and an improved living environment is a worthwhile trade-off. As Hueting notes, "In the

^{xix} John Kenneth Galbraith has written extensively about this. Given that so many people complain about their hectic lives, it is possible that many would happily trade some of their goods and services for more leisure time...especially if they spent that leisure away from the TV and other reminders to maintain a non-stop materialist existence.

^{xx} These small shops repair rather than dispose of items, and they allow people to buy things close to their homes and workplaces instead of driving to big box shops surrounded by huge parking lots.

right conditions, environmental conservation creates employment. ... In my opinion this is the most important conclusion that can be drawn from the scenario exercise."⁶⁴ Another major conclusion is that it can work. Although the model would play out differently in various settings, the main findings hold: burning less fuel and using more human effort would create more employment, more equality, and a cleaner environment.

A direct approach to increasing wellbeing rather than consumption and an appropriate measuring system to evaluate progress would eliminate the incentives to make money while harming health. A wellbeing-focused approach would illustrate that the value of health goes far beyond simple dollars and cents. Such an approach would also help in demonstrating the need to incorporate health – both in terms of access to health care and of the living conditions that promote health – into declarations of/actions on human rights. Canadian environmental activist David Suzuki, for example, is working to include the right to clean air and water in Canada's Charter of Rights and Freedoms; ninety-five countries already recognize the right to a healthy environment.⁶⁵ Essential human rights should not be limited to the right to assembly, religion, and free speech.

While it is true that it is not possible to have it all – employment, a healthy environment, and all the material goods we desire – it is possible to have a lot. It will be easier to make sensible decisions if the full range of options with their costs and benefits are known. It is time to stop believing that difficult choices must be made between employment and the environment, or between health and the economy. It is time to maximize health, employment, *and* the environment within a broader definition of prosperity.

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