

The Recalibrating Our “Moral Compasses” (ROMC) Survey Project

Appendix B

“Example Challenge Assessment”

by Stefan Pasti,

Project Coordinator--The Recalibrating Our “Moral Compasses” (ROMC) Survey Project
Founder and Resource Coordinator—The Community Peacebuilding and Cultural Sustainability (CPCS) Initiative

Note about source references: almost all source references for the quoted passages in this compilation can be found by key word searches in the CPCS Initiative document “Invitation Package for Possible Board of Advisors” (589 pages, Nov. 2013)(see <http://www.cpcs.co/invitation-package-for-possible-board-of-advisors.html>) [with an additional caution that quoted passages on pages 316-348 have source references compiled together in a footnote section which goes from p. 349-367]

The Ten Challenges (identified by Stefan Pasti as the most critical challenges of our times):

- 1) Global Warming and Reducing Greenhouse Gas Emissions**
- 2) A Marginalization of the Treasured Wisdom of Religious, Spiritual, and Moral Traditions**
- 3) “Cultures” of violence, greed, corruption, and overindulgence**—which have become so common that many of us accept such as inevitable; which are a significant part of the current crises of confidence in financial markets; and which are in many ways slowing the restructuring of investment priorities needed to respond to an increasing number of other critical challenges
- 4) The End of the Fossil Fuel Era**
- 5) The increasing world population and its implications relating to widespread resource depletion**—with a special focus on the increasing number of people who are consuming material goods and ecological resources indiscriminately
- 6) We are creating more and more “urban agglomerations”**—(cities with a population of more than 1 million people—more than 400), which require more and more complex and energy intensive infrastructures, where it is more and more difficult to trace the consequences of our individual investments of time, energy, and money—and which are the least appropriate models when it comes to implementing resolutions to many of the other challenges in this ten point assessment
- 7) Global inequities and the tragic cycles of malnutrition, disease, and death**
- 8) Significant progress towards positive tipping points for the other challenges cited in this list will almost certainly make it impossible for the U.S., and many other countries, to resolve unprecedented public debt**
- 9) Deterioration of trust/confidence in institutions responsible for guiding public discourse—and the related loss of social and spiritual cohesion**
- 10) Sorting out what are real challenges and what are sound and practical solutions is becoming more and more difficult**—as there are now, in most communities of the world, a multitude of ideas of all kinds coming to the fore in personal, family, community, and cultural life—all at the same time. Thus, even analysis supported by much credible evidence—that there are many danger signs flashing now (involving significant threats to ecological stability and social cohesion)—can be easily lost amidst a swirl of misinformation, other more trivial information, and the “siren song” of multiple entertainment venues.

1) Global Warming and Reducing Greenhouse Gas Emissions

"...we are still perfectly on track for a temperature increase up to 5.3 degrees C"(9.5° F)..."

- a) "Scientists agree that countries' current United Nations Framework Convention on Climate Change emission pledges and commitments would most likely result in 3.5 to 4°C (7.2° F) warming. And the longer those pledges remain unmet, the more likely a 4°C world becomes."
- b) *"...we are still perfectly on track for a temperature increase up to 5.3 degrees C"(9.5° F)..."*
- c) "The report shows that emissions should peak at 44 GtCO₂e by 2020 and fall to 22GtCO₂e by 2050 to stay within a 2C target, but under a business-as-usual scenario, which includes no emissions pledges, emissions would reach 59 GtCO₂e in 2020."
- d) "Another way Arctic warming could have worldwide consequences is through its influence on permafrost. Permanently frozen soils worldwide contain 1400-1700 Gigatons of carbon, about four times more than all the carbon emitted by human activity in modern times."

"... what do we have to point to....?"

- d) "...the energy industry's ability to boost production of oil, coal, and natural gas in North America is feeding a global surge in demand for these commodities, ensuring ever higher levels of carbon emissions. "
- b) "Developing countries seek the same modern conveniences—dishwashers, televisions, computers, and cars—enjoyed by the developed world and which are currently powered mostly by fossil fuels. We can imagine that they can improve their standard of living without increasing their fossil fuel consumption, but what do we have to point to in order to show that it can be done?.... This is why I am extremely skeptical that carbon emissions will be reined in."

"... three quarters of the fossil fuel reserves need to stay in the ground..."

- a) "'Limiting global warming to an agreed U.N. ceiling 'means that three quarters of the fossil fuel reserves need to stay in the ground, and the fossil fuels we do use must be utilized sparingly and responsibly,' she said." (in article "UN Climate Chief Figueres Urges 'Urgent Transformation' Of Oil And Gas Industry"; April, 2014)
- b) "The world is on the brink of the 'largest bubble ever' in finance, because of the undisclosed value of high-carbon assets on companies' balance sheets, and investment managers who fail to take account of the risks are failing in their fiduciary duty to shareholders and investors, Al Gore and his investment partner, David Blood, have said."
- c) "Some might assume that bond markets are shielded from the effects of climate change, ecosystem degradation, and water scarcity. With more than \$40 trillion of sovereign debt in global markets at any given time, that is a very high-risk game...." (in "Sovereign Environmental Risk" by Achim Steiner and Susan Burns; October, 2012)

2) A Marginalization of the Treasured Wisdom of Religious, Spiritual, and Moral Traditions

"It would be foolish to underestimate the challenge of checking the consumption juggernaut...."

a) "Popular programming reflects a level of acceptance and shared values among large numbers of people. People tend to watch programs that meet their approval. If they are truly offended by violent programs, they would not watch them. In that sense, media programming can be regarded as a text that reflects the attitudes, values, behaviors, preoccupations, and myths that define a culture."

"At the same time, media programming reinforces cultural attitudes, values, behaviors, preoccupations, and myths. Media messages are communicated through the countless hours of media programming that repeat, directly or indirectly, the cultural script."

"Finally, the media do not merely reflect or reinforce culture, but in fact shape attitudes, values, behavior, preoccupations, and myths."

b) "Worldwide advertising spending grew by 3.2% year-over-year in 2012 to reach \$557 billion, per data from Nielsen's latest quarterly Global AdView Pulse report."

c) "What is basic is that advertising, as such, with all its vast power to influence values and conduct, cannot ever lose sight of the fact that it ultimately regards man as a consumer and defines its own mission as one of stimulating him to consume or to desire to consume."

d) "By virtually any measure—household expenditures, number of consumers, extraction of raw materials—consumption of goods and services has risen steadily in industrial nations for decades, and it is growing rapidly in many developing countries."

"By one calculation, there are now more than 1.7 billion members of 'the consumer class'—nearly half of them in the developing world. A lifestyle and culture that became common in Europe, North America, Japan, and a few other pockets of the world in the twentieth century is going global in the twenty-first." (Global Consumer Class, **2004**; Worldwatch Institute)

e) "It would be foolish to underestimate the challenge of checking the consumption juggernaut...."

f) "Developing countries seek the same modern conveniences—dishwashers, televisions, computers, and cars—enjoyed by the developed world and which are currently powered mostly by fossil fuels. We can imagine that they can improve their standard of living without increasing their fossil fuel consumption, but what do we have to point to in order to show that it can be done?... This is why I am extremely skeptical that carbon emissions will be reined in."

g) "The modern worldview is that the more material goods you have, the better your life will be. But Gandhi said, 'A certain degree of physical comfort is necessary but above a certain level it becomes a hindrance instead of a help; therefore the ideal of creating an unlimited number of wants and satisfying them, seems to be a delusion and a trap. The satisfaction of one's physical needs must come at a certain point to a dead stop before it degenerates into physical decadence.'"

h) "How can the 'reduce' piece be incorporated into the dominant values, social norms, and attitudes of communities around the world without somehow coming to terms with the fundamental inconsistencies between cultures which encourage indiscriminant consumption and the treasured wisdom of most

religious, spiritual, and moral traditions, which emphasize--

- i) sacrificing personal desires for the greater good of the whole
- ii) finding contentment and quality of life while consuming less material goods and ecological services
- iii) using resources carefully, so that there is surplus available for emergency assistance”

“The underlying assumption seemed to be that as research and rational reflection explained more and more of the world, religion would become an increasingly unnecessary part of human life.”

a) “For most of the 20th Century, and especially since the Second World War, higher education has been largely a secular enterprise. The goal of a college or university education has been to provide students with scholarly ways of understanding both themselves and the world around them that required little or no appeal to God, religion, or the sacred. The underlying assumption seemed to be that as research and rational reflection explained more and more of the world, religion would become an increasingly unnecessary part of human life. Higher education prepares students for the future, and religion was not particularly relevant for the future as it was envisioned at most universities.”

b) “Most economic development and growth strategies encouraged rapid accumulation of physical, financial and human capital, but at the expense of excessive depletion and degradation of natural capital, which includes the endowment of natural resources and ecosystems. By depleting the world’s stock of natural wealth – often irreversibly – this pattern of development and growth has had detrimental impacts on the wellbeing of current generations and presents tremendous risks and challenges for the future. The recent multiple crises are symptomatic of this pattern. Existing policies and market incentives have contributed to this problem of capital misallocation because they allow businesses to run up significant, largely unaccounted for, and unchecked social and environmental externalities.”

c) “It is a little surprising that there has been no controversy over economics education, because economics is, in our culture, deeply controversial, often on moral and religious grounds..... A part of the problem is what the texts and the new national standards leave out. They say little about poverty, especially as a moral or spiritual problem. They are usually silent about the moral relation of the First and Third Worlds. They typically ignore the effects of economics and technology on the environment. They are oblivious to the moral and spiritual problems of consumer culture. They ask no questions about dehumanizing work. They emphasize the importance of the profit motive and competition, but say nothing about the possibility of excess profits or the possible costs of competition....”

d) “... every article in the bazaar has moral and spiritual values attached to it... hence it behooves us to enquire into the antecedents of every article we buy.... (Yet this) is an arduous task, and it becomes almost impossible for ordinary persons to undertake it when the article comes from far off countries. Therefore, it is that we have to restrict our purchase to articles made within our cognizance. This is the moral basis of Swadeshi.”

“If we feel it is beyond us to guarantee the concomitant results of all our transactions, it necessarily follows that we must limit our transactions to a circle well within our control. This is the bed rock of swadeshi... The smaller the circumference, the more accurately can we gauge the results of our actions, and (the) more conscientiously shall we be able to fulfill our obligations as trustees.”

e) “Unfortunately, there are many people in our communities who—regardless of the difficulties and urgencies associated with resolving multiple crises—choose to focus their attention on trying to make

money by preying of people's fears, manipulating people's trust, and/or encouraging people to abandon hope in higher aspirations, and indulge in unhealthy, or immoral behavior. Such behavior is clearly counterproductive to the building of caring communities; it can be very dangerous for community morale; and it can become a crippling obstacle in times of crises."

"... we cannot afford to exclude from our 'tool box' the time-tested sources which have helped people learn compassion over many centuries. What we need to do instead is to learn how to cultivate the time-tested sources so that the sources yield the treasured wisdom."

a) "... it has taken a lot of being confused about the cardinal directions on our "moral compasses" to get where we are (global warming can be understood as the cumulative result of many other unresolved issues which have, in themselves become critical challenges)—and many of the unresolved issues contributing to global warming have been around since the dawn of civilization (Ex: cultures of violence, greed, corruption, and overindulgence)."

b) "... unfortunately, much of the real treasured wisdom of religious, spiritual, and moral traditions now seems to be hidden—and thus in need of being re-discovered. These "hidden" resources include teachings which inspire and encourage people to:

- i) sacrifice personal desires for the greater good of the whole
- ii) find contentment and quality of life while consuming less material goods and ecological services
- iii) use resources carefully, so that there is surplus available for emergency assistance

c) "...it is becoming more and more likely that an exponential increase in compassion for our fellow human beings will need to become an essential and critical element of a truly comprehensive response to the challenges of our times. In such circumstances, we cannot afford to exclude from our 'tool box' the time-tested sources which have helped people learn compassion over many centuries. What we need to do instead is to learn how to cultivate the time-tested sources so that the sources yield the treasured wisdom."

d) "Many people may think it is naïve to imagine that people from so many diverse religious, spiritual, moral, and cultural traditions can decide to come together in such a way as to not only encourage, but participate in, a high percentage of constructive thinking and constructive action in response to the difficult challenges ahead (as in the high levels of participation encouraged by comprehensive Community Visioning Initiatives). From this writer's point of view, such skepticism and cynicism depend for their existence on doubts as to whether it is possible for people to achieve highly advanced forms of wisdom and compassion through genuine instruction and sincere effort. *Thus it is that there is a great responsibility on those people who are in any way representatives of religious, spiritual, and/or moral traditions—to demonstrate what is possible along the lines of wisdom and compassion, to provide genuine instruction when sincere efforts are being made, to contribute to the greater good of the whole, and to help restore confidence in the higher values of life.*"

e) "Widespread cynicism that many of the critical challenges of our times will not be resolved could become a crippling factor which may undermine many positive and constructive solution-oriented initiatives, which would have otherwise led to positive tipping points."

3) “Cultures” of violence, greed, corruption, and overindulgence—which have become so common that many of us accept such as inevitable; which are a significant part of the current crises of confidence in financial markets; and which are in many ways slowing the restructuring of investment priorities needed to respond to an increasing number of other critical challenges

“... no solutions seem to be in sight for these problems.”

- a) “Total world military expenditure in 2012 was \$1.75 trillion. This is equivalent to 2.5 per cent of global GDP.”
- b) “The global drugs trade and the global arms trade are integral to violence in both developing and industrialized countries. Even modest progress on either front will contribute to reducing the amount and degree of violence suffered by millions of people. To date, however—and despite their high profile in the world arena—no solutions seem to be in sight for these problems.”
- c) “Because systems of meaning and ways of thinking differ from one culture to another, people from different cultures typically develop different ideas about morality and the best way to live. They often have different conceptions of moral authority, truth, and the nature of community.... These cultural differences become even more problematic when groups have radically different expectations about what is virtuous, what is right, and how to deal with moral conflicts.”

One of the problems:

“They may form negative stereotypes and attribute moral depravity or other negative characteristics to those who violate their cultural expectations, while they ignore their own vices and foibles, perceiving their own group to be entirely virtuous.”

- c) “Most people would consider it unusual for a person to request to be excused from military service based on their religious, spiritual, or moral convictions.”
- d) “We want our teachers to be value-oriented because we want them to be rightly equipped as vehicles of values for the benefit of our children and youth. By his/her very nature, the teacher is a transmitter, a messenger, a carrier. Our determination of what he has to transmit will depend on what we determine to be valuable for our children and youth. Every society has a value system of some kind. Indian society is rich in it. But what is the use of such a bank balance of values if it is not useful in solving our current social problems?”
- e) “Widespread cynicism that many of the critical challenges of our times will not be resolved could become a crippling factor which may undermine many positive and constructive solution-oriented initiatives, which would have otherwise led to positive tipping points.”

“It is a little surprising that there has been no controversy over economics education....”

- a) “Hunger and malnutrition are in fact the number one risk to health worldwide — greater than AIDS, malaria and tuberculosis combined.”

“22,000 children die each day due to conditions of poverty.”

“Undernutrition contributes to 2.6 million deaths of children under five each year - one third of the global total.”

“More than 11 million children die each year from preventable health issues such as malaria, diarrhea and pneumonia.”

b) “About 1/3 of the food produced in the world for human consumption every year; approximately 1.3 billion tonnes gets lost or wasted. Industrialized and developing countries waste roughly the same quantities of food – respectively 670 and 630 million tonnes.”

c) “...in 1997 the World Health Organization (WHO) formally recognized obesity as a global epidemic.”

“One of the main reasons Americans eat as poorly as we do may be the ubiquity of low-priced, unhealthy foods and their promotion...we are surrounded with tempting options that aren’t good for us.”

“65 percent of the world’s population live in countries where overweight and obesity kills more people than underweight and malnutrition.”

“By 2001 the rainforest areas of Brazil were reduced by a fifth (respect of 1970), to around 4,000,000 km²; the ground cleared was mainly destined for cattle pasture - Brazil is the world's largest exporter of beef with almost 200,000,000 head of cattle.”

“12 percent of the world's population uses 85 percent of its water.”

d) “Tobacco use is the world’s leading cause of preventable death, according to the World Health Organization.”

“Global consumption of cigarettes has been rising steadily since manufactured cigarettes were introduced at the beginning of the 20th century.”

Profits—“countries do not profit economically from tobacco production and consumption – in fact, they suffer great financial harm.”

“... every year tobacco kills more Americans than did World War II — more than AIDS, cocaine, heroin, alcohol, vehicular accidents, homicide and suicide combined.”

Burden Shifts to the World’s Poorest Countries—“Nearly 80% of those who die from tobacco-related illnesses are in low- and middle-income countries.”

e) “Alcohol is the world’s third largest risk factor for disease burden...”

“Alcohol in America is big business. We spent \$162 billion buying beer, wine and liquor in 2011.”

f) “Taken together, the bottom half of the global population own less than 1 percent of total wealth. In sharp contrast, the richest 10 percent hold 86 percent of the world’s wealth, and the top 1 percent alone account for 46 percent of global assets.”

g) “It is a little surprising that there has been no controversy over economics education, because economics is, in our culture, deeply controversial, often on moral and religious grounds..... A part of the problem is what the texts and the new national standards leave out. They say little about poverty, especially as a moral or spiritual problem. They are usually silent about the moral relation of the First and Third Worlds. They typically ignore the effects of economics and technology on the environment. They are oblivious to the moral and spiritual problems of consumer culture. They ask no questions about dehumanizing work. They emphasize the important of the profit motive and competition, but say nothing about the possibility of excess profits or the possible costs of competition....”

“... the jargon is complicated, the transactions are complicated—you’ve relied on that complicated situation to avoid a lot of scrutiny.”

a) State Lotteries in the United States—“11 states collecting more revenue from their state lottery than from their state corporate income tax during FY2009.”

b) “Tailor-made derivatives, not traded on a futures exchange are traded on over-the-counter markets, also known as the OTC market. These consist of investment banks who have traders who make markets in these derivatives, and clients such as hedge funds, commercial banks, government sponsored enterprises, etc. Products that are always traded over-the-counter are swaps, forward rate agreements, forward contracts, credit derivatives, accumulators etc. The total notional amount of all the outstanding positions at the end of June 2004 stood at \$220 trillion. By the end of 2007 this figure had risen to \$596 trillion and in 2009 it stood at \$615 trillion.” [Note: the size of the world economy is estimated to be around \$85 trillion]

c) “Thank you, Mr. Chairman. You know, in the good old days of investment banking, (it was--), they were considered very honorable and proud institutions—our investment bankers of Wall Street—they provided financial services: investment of capital in good businesses, helping government with assistance to issue bonds to build the great infrastructures of our nation. Then you fast forward through the public offerings of all these companies (to the date) when the risk of these companies shifted from the main partners to the nameless faceless shareholders. And you fast forward a little bit further, and you land right at the feet of synthetic CDOs.

“Now, I got to be honest, I think that if we had to put the odds on this hearing today you guys would probably have odds in your favor, because the jargon is complicated, the transactions are complicated—you’ve relied on that complicated situation to avoid a lot of scrutiny.

“We have spent a lot of time going through all these documents, and let me just explain, in very simple terms, what synthetic CDOs are. They are instruments that are created so that people can bet on them. It’s the “la-la land” of ledger entries. It’s not investment in a business that has a good idea; it’s not assisting local government in building infrastructure. It’s gambling. Pure and simple—raw gambling.”

d) “GBGC’s provisional figures show that gambling activities generated US\$ 419 billion in revenues across the world in 2011.”

4) The End of the Fossil Fuel Era

“The planet’s ecological systems are on the verge of catastrophic change for which few societies are prepared.”

a) “The planet’s ecological systems are on the verge of catastrophic change for which few societies are prepared. So far, responses by governments to this emergency are inadequate, or counterproductive. We call it the “Triple Crisis,” the convergence of three advancing conditions:

- i) Planet-wide climate chaos and global warming
- ii) The end of the era of cheap energy (“peak oil”)
- iii) The depletion of many of the world’s key resources: water, timber, fish, fertile soil, coral reefs; and the expected extinction of 50% of the world’s species.

“All are rooted in the same systemic problem—massive overuse of fossil fuels and the Earth’s resources; all driven by an economic ideology of hyper growth and consumption that’s beyond the limits of the planet to sustain.”

“... it was the internal combustion engine combined with cheap oil that provided mobility for people and freight that fueled the phenomenal urban growth of the twentieth century.”

- a) “In 1900, only 4,192 passenger cars were in existence (there were no trucks, buses, etc.)”
“In 1968, there were 169,994,128 passenger cars in the world, and 46,614,342 trucks and buses—for a total worldwide, of 216,608,470 motor vehicles.”
“In 1996, there were 485,954,000 cars registered worldwide, and 185,404,000 trucks and buses—for a total, worldwide, of 671,358,000 motor vehicles.”

“It is estimated that over 1 billion passenger cars travel the streets and roads of the world today. The 1 billion-unit mark was reached in 2010 for the first time ever.”

“Earlier this year, the OECD's International Transport Forum forecast that the number of cars worldwide would reach 2.5 billion by 2050.”

b) “The evolution of modern cities was tied to advances in transport, initially for ships and trains. But it was the internal combustion engine combined with cheap oil that provided mobility for people and freight that fueled the phenomenal urban growth of the twentieth century.”

c) “The oil used to move resources into and out of cities often comes from distant oil fields. Rising oil prices will affect cities, but they will affect even more the suburbs that surround them. The growing scarcity of water and the high energy cost of transporting it over long distances may begin to constrain the growth of some cities.”

d) “Today some 18 countries, containing half the world’s people, are overpumping their aquifers. Among these are the big three grain producers—China, India, and the United States—and several other populous countries, including Iran, Pakistan and Mexico... And since 70 percent of world water use is for irrigation, water shortages can quickly translate into food shortages.”

e) “Nearly a quarter of total of the global energy-related carbon dioxide emissions can be attributed to the transport sector. Globally, carbon dioxide emissions from transport have increased 85 per cent between 1973 and 2007.”

f) “Limiting global warming to an agreed U.N. ceiling ‘means that three quarters of the fossil fuel reserves need to stay in the ground, and the fossil fuels we do use must be utilized sparingly and responsibly,’ she said.” (in article “UN Climate Chief Figueres Urges 'Urgent Transformation' Of Oil And Gas Industry”; April, 2014)

“By depleting the world’s stock of natural wealth – often irreversibly – this pattern of development and growth has had detrimental impacts on the wellbeing of current generations and presents tremendous risks and challenges for the future.”

a) “With some confidence, I can tell you that the age of oil out of 8,000 years of recorded history will occupy about 300 years. As Hyman Rickover noted, this is but a blip in the long history of man. He said, ‘Fossil fuels resemble capital in the bank. A prudent and responsible parent will use this capital sparingly in order to pass on to his children as much as possible of his inheritance.’

“Do you know what we should have done when we found this incredible wealth under the ground, a barrel of which equaled the work output of 12 people working all year? We should have stopped to ask ourselves, what can we do with this to provide the most good for the most people for the longest time? That clearly is not what we did.”

b) “Most economic development and growth strategies encouraged rapid accumulation of physical, financial and human capital, but at the expense of excessive depletion and degradation of natural capital, which includes the endowment of natural resources and ecosystems. By depleting the world’s stock of natural wealth – often irreversibly – this pattern of development and growth has had detrimental impacts on the wellbeing of current generations and presents tremendous risks and challenges for the future. The recent multiple crises are symptomatic of this pattern. Existing policies and market incentives have contributed to this problem of capital misallocation because they allow businesses to run up significant, largely unaccounted for, and unchecked social and environmental externalities.”

c) “Biro: Yes, one day it will definitely end. And I think we should leave oil before it leaves us. That should be our motto. So we should prepare for that day - through research and development on alternatives to oil, on which living standards we want to keep and what alternative ways we can find.”

5) The increasing world population and its implications relating to widespread resource depletion— with a special focus on the increasing number of people who are consuming material goods and ecological resources indiscriminately

World Population Milestones

“In 1804, the world population was 1 billion.
In 1927, the world population was 2 billion (123 years later).
In 1960, the world population was 3 billion (33 years later).

In 1974, the world population was 4 billion (14 years later).
In 1987, the world population was 5 billion (13 years later).
In 1999, the world population was 6 billion (12 years later).
In 2011, the world population was 7 billion (12 years later)."

"As of Oct 15, 2014 23:25 UTC (Eastern+5), the world population was estimated to be 7,198,660,200."

"It would be foolish to underestimate the challenge of checking the consumption juggernaut...."

a) "Worldwide advertising spending grew by 3.2% year-over-year in 2012 to reach \$557 billion, per data from Nielsen's latest quarterly Global AdView Pulse report."

b) "What is basic is that advertising, as such, with all its vast power to influence values and conduct, cannot ever lose sight of the fact that it ultimately regards man as a consumer and defines its own mission as one of stimulating him to consume or to desire to consume."

c) "By virtually any measure—household expenditures, number of consumers, extraction of raw materials—consumption of goods and services has risen steadily in industrial nations for decades, and it is growing rapidly in many developing countries."

"By one calculation, there are now more than 1.7 billion members of 'the consumer class'—nearly half of them in the developing world. A lifestyle and culture that became common in Europe, North America, Japan, and a few other pockets of the world in the twentieth century is going global in the twenty-first." (Global Consumer Class, **2004**; Worldwatch Institute)

d) "It would be foolish to underestimate the challenge of checking the consumption juggernaut...."

"Most economic development and growth strategies encouraged rapid accumulation of physical, financial and human capital, but at the expense of excessive depletion and degradation of natural capital, which includes the endowment of natural resources and ecosystems."

a) "Most economic development and growth strategies encouraged rapid accumulation of physical, financial and human capital, but at the expense of excessive depletion and degradation of natural capital, which includes the endowment of natural resources and ecosystems. By depleting the world's stock of natural wealth – often irreversibly – this pattern of development and growth has had detrimental impacts on the wellbeing of current generations and presents tremendous risks and challenges for the future. The recent multiple crises are symptomatic of this pattern. Existing policies and market incentives have contributed to this problem of capital misallocation because they allow businesses to run up significant, largely unaccounted for, and unchecked social and environmental externalities."

b) "53% of the world's fisheries are fully exploited, and 32% are overexploited, depleted, or recovering from depletion."

c) "By 2001 the rainforest areas of Brazil were reduced by a fifth (respect of 1970), to around 4,000,000 km²; the ground cleared was mainly destined for cattle pasture - Brazil is the world's largest exporter of beef with almost 200,000,000 head of cattle."

d) “About 1/3 of the food produced in the world for human consumption every year; approximately 1.3 billion tonnes gets lost or wasted. Industrialized and developing countries waste roughly the same quantities of food – respectively 670 and 630 million tonnes.”

e) “Between 1945 and 1975, about 30 million hectares of land in the United States, were lost under concrete and asphalt, half of this being arable land (land carrying capacity is a measure of how many people the soil/climate can permanently support when the land is planted in staple crops).”

[Note: “Not all the soil which covers the Earth’s ice free land surface is suitable for growing crops. In fact, of the total area of 13 billion hectares, a mere 11% presents no serious limitations to agriculture. The rest is either too dry, too wet, too poor in nutrients, too shallow, or too cold.”]

f) “Growing prosperity and urbanization could double the volume of municipal solid waste annually by 2025—from today’s 1.3 billion tons per year to 2.6 billion tons.”

g) “WWF’s Living Planet Index, which measures the health of forests, oceans, freshwater, and other natural systems, shows a 35 percent decline in Earth’s ecological health since 1970.

“The new reality....”

a) “It is a little surprising that there has been no controversy over economics education, because economics is, in our culture, deeply controversial, often on moral and religious grounds..... A part of the problem is what the texts and the new national standards leave out. They say little about poverty, especially as a moral or spiritual problem. They are usually silent about the moral relation of the First and Third Worlds. They typically ignore the effects of economics and technology on the environment. They are oblivious to the moral and spiritual problems of consumer culture. They ask no questions about dehumanizing work. They emphasize the importance of the profit motive and competition, but say nothing about the possibility of excess profits or the possible costs of competition....”

b) “The new reality,” says Brown, “is that the world is only one poor harvest away from chaos. It is time to redefine security. The principal threats to our future are no longer armed aggression but instead climate change, population growth, water shortages, spreading hunger, and failing states. What we now need is a mobilization to reverse these trends on the scale and urgency of the U.S. mobilization for World War II.”

6) We are creating more and more “urban agglomerations”—(cities with a population of more than 1 million people—more than 400), which require more and more complex and energy intensive infrastructures, where it is more and more difficult to trace the consequences of our individual investments of time, energy, and money—and which are the least appropriate models when it comes to implementing resolutions to many of the other challenges in this ten point assessment

“By 2030, China and India will have more than 221 cities and 68 cities, respectively, with populations of more than one million people each....”

a) “In 1800, only 3 percent of the world’s population lived in urban areas.”

“By 1900, almost 14 percent were urbanites, although only 12 cities had 1 million or more inhabitants.”

“In 1950, 30% of the world’s population resided in urban centers. The number of cities with over 1 million people had grown to 83.”

“In 2008, for the first time, the world’s population was evenly split between urban and rural areas. There were more than 400 cities over 1 million and 19 over 10 million.”

“By 2030, China and India will have more than 221 cities and 68 cities, respectively, with populations of more than one million people each, according to research by the McKinsey Global Institute.”

b) U.S. Infrastructure Funding Gap (2013) (calculated by ASCE)--\$1.611 trillion

“The growing scarcity of water and the high energy cost of transporting it over long distances may begin to constrain the growth of some cities.”

a) “Early cities relied on food and water from the surrounding countryside, but today cities often depend on distant sources for basic amenities. Los Angeles, for example, draws much of its water from the Colorado River, some 600 miles away. Mexico City’s burgeoning population, living at an altitude of over 9,000 feet, depends on the costly pumping of water from 100 miles away that must be lifted over 3,000 feet to augment inadequate water supplies. Beijing is planning to draw water from the Yangtze River basin some 800 miles away.”

b) “The oil used to move resources into and out of cities often comes from distant oil fields. Rising oil prices will affect cities, but they will affect even more the suburbs that surround them. The growing scarcity of water and the high energy cost of transporting it over long distances may begin to constrain the growth of some cities.”

c) “Today some 18 countries, containing half the world’s people, are overpumping their aquifers. Among these are the big three grain producers—China, India, and the United States—and several other populous countries, including Iran, Pakistan and Mexico... And since 70 percent of world water use is for irrigation, water shortages can quickly translate into food shortages.”

d) “Nearly a quarter of total of the global energy-related carbon dioxide emissions can be attributed to the transport sector. Globally, carbon dioxide emissions from transport have increased 85 per cent between 1973 and 2007.”

e) “Limiting global warming to an agreed U.N. ceiling ‘means that three quarters of the fossil fuel reserves need to stay in the ground, and the fossil fuels we do use must be utilized sparingly and responsibly,’ she said.” (in article “UN Climate Chief Figueres Urges ‘Urgent Transformation’ Of Oil And Gas Industry”; April, 2014)

“... The smaller the circumference, the more accurately can we gauge the results of our actions, and (the) more conscientiously shall we be able to fulfill our obligations as trustees.”

a) “A shack, about 2 metres long and 2 metres wide, is home to a family composed of husband, wife and four children. It is just one of 7700 such shacks in a street behind the residential area in Delhi.... The circumstances described above are very similar to those experienced by the vast majority of the more than 900 million slum dwellers all over the world...”

b) “In Mexico City (950 square miles), as in many other megacities in the developing world, urban sprawl exists as nearly 40% of city dwellers live in the urban periphery in poverty and environmental degradation. These high density settlements are often highly polluted owing to the lack of urban services, including running water, trash pickup, electricity or paved roads. Nevertheless, cities provide poor people with more opportunities and greater access to resources to transform their situation than rural areas.”

c) “The knowledge, priorities and aspirations of small-scale producers, and other citizens whose livelihoods depend on food provisioning, are rarely included in policy debates on the future of food,

farming and development. When governments do decide to hold public consultations to help guide their decisions, policy experts as well as representatives of large farmers and agri-food corporations are usually centre stage in these debates, rather than small-scale producers, food workers, small food businesses and other citizens. Similarly, when policy think tanks and academics organise discussions to inform the choices of decision-makers it is striking that the voices of farmers, pastoralists, fisherfolk, food workers and indigenous peoples are largely absent from such processes.... (Thus), many rural and urban development schemes have overlooked the importance of locally specific ways of meeting needs for food, health, shelter, energy, education and other fundamental human needs."

d) "... every article in the bazaar has moral and spiritual values attached to it... hence it behooves us to enquire into the antecedents of every article we buy.... (Yet this) is an arduous task, and it becomes almost impossible for ordinary persons to undertake it when the article comes from far off countries. Therefore, it is that we have to restrict our purchase to articles made within our cognizance. This is the moral basis of Swadeshi."

"If we feel it is beyond us to guarantee the concomitant results of all our transactions, it necessarily follows that we must limit our transactions to a circle well within our control. This is the bed rock of swadeshi... The smaller the circumference, the more accurately can we gauge the results of our actions, and (the) more conscientiously shall we be able to fulfill our obligations as trustees."

e) "What if there needed to be a reversal of the urbanization trend, and a demographic shift from megacities to more ecologically sustainable and villages, towns, and small cities (with much more potential to achieve carbon neutral economies)?"

f) "'Food sovereignty' is an alternative paradigm for food, fisheries, agriculture, pastoralism and forest use that is emerging in response to this democratic deficit. This alternative policy framework for food and agriculture is also a citizens' response to the multiple social and environmental crises induced by modern food systems everywhere. Indeed, many proposals for food sovereignty directly seek to reverse the socially and ecologically destructive nature of industrial farming, fisheries, forestry and livestock management, and the wider food systems they are part of."

7) Global inequities and the tragic cycles of malnutrition, disease, and death

"A more equitable distribution of resources is in our best interest for a peaceful future. "

a) "The richest 20% of the world's population account for 80% of the world's consumption of goods and services."

[From the 1998 UN Human Development Report "Consumption for Human Development" (in Overview, p. 2)]

b) "Taken together, the bottom half of the global population own less than 1 percent of total wealth. In sharp contrast, the richest 10 percent hold 86 percent of the world's wealth, and the top 1 percent alone account for 46 percent of global assets."

c) "The United States currently has 5 percent of the world's population, but uses 25 percent of the world's annual energy production. This disproportionate consumption of energy relative to global consumption causes loss of the world's good will and provides a context for potential military conflicts, at the cost of lives, money, and political capital. A more equitable distribution of resources is in our best interest for a peaceful future. "

- d) "People in industrialized countries comprise only about 20% of the global population, yet they consume 81% of the world's paper and 76% of its timber."
- e) "12 percent of the world's population uses 85 percent of its water."
- f) "By 2001 the rainforest areas of Brazil were reduced by a fifth (respect of 1970), to around 4,000,000 km²; the ground cleared was mainly destined for cattle pasture - Brazil is the world's largest exporter of beef with almost 200,000,000 head of cattle."

"Hunger and malnutrition are in fact the number one risk to health worldwide...."

- a) "22,000 children die each day due to conditions of poverty."

"Undernutrition contributes to 2.6 million deaths of children under five each year - one third of the global total."

"More than 11 million children die each year from preventable health issues such as malaria, diarrhea and pneumonia."

"Hunger and malnutrition are in fact the number one risk to health worldwide — greater than AIDS, malaria and tuberculosis combined."

- b) "Where virtually all water has been claimed, cities can typically get more water only by taking it from irrigation. Countries then import grain to offset the loss of irrigated grain production. Since it takes 1,000 tons of water to produce one ton of grain, importing grain is the most efficient way to import water."

"Fearing they might not be able to buy needed grain from the market, some of the more affluent countries, led by Saudi Arabia, China, and South Korea, then took the unusual step of buying or leasing land long term in other countries on which to grow food for themselves. These land acquisitions have since grown rapidly in number. Most of them are in Africa. Among the principal destinations for land hunters are Ethiopia, Sudan, and South Sudan, each of them countries where millions of people are being sustained with food donations from the U.N. World Food Programme.

"As of mid-2012, hundreds of land acquisition deals had been negotiated or were under negotiation, some of them exceeding a million acres. A 2011 World Bank analysis of these "land grabs" reported that at least 140 million acres were involved—an area that exceeds the cropland devoted to corn and wheat combined in the United States. This onslaught of land acquisitions has become a land rush as governments, agribusiness firms, and private investors seek control of land wherever they can find it."

- c) "About 1/3 of the food produced in the world for human consumption every year; approximately 1.3 billion tonnes gets lost or wasted. Industrialized and developing countries waste roughly the same quantities of food – respectively 670 and 630 million tonnes."

"Supermarkets, restaurants and other nonresidential establishments in Montgomery County (MD—USA) throw away 96 million pounds of food a year."

“The Great Way is very level; but people greatly delight in tortuous paths.”

a) “The modern worldview is that the more material goods you have, the better your life will be. But Gandhi said, ‘A certain degree of physical comfort is necessary but above a certain level it becomes a hindrance instead of a help; therefore the ideal of creating an unlimited number of wants and satisfying them, seems to be a delusion and a trap. The satisfaction of one's physical needs must come at a certain point to a dead stop before it degenerates into physical decadence.’”

b) “Were I to have the least bit of knowledge, in walking on a Great Road, it's only going astray that I would fear.
The Great Way is very level;
But people greatly delight in tortuous paths.”

8) Significant progress towards positive tipping points for the other challenges cited in this list will almost certainly make it impossible for the U.S., and many other countries, to resolve unprecedented public debt

“Some might assume that bond markets are shielded from the effects of climate change, ecosystem degradation, and water scarcity. With more than \$40 trillion of sovereign debt in global markets at any given time, that is a very high-risk game....”

a) “Using accounting principles that approximate how publicly traded companies are required to calculate their obligations, at the close of its 2013 fiscal year, the (U.S.) federal government had about \$71.0 trillion in debts, liabilities, and unfinanced obligations.”

b) American consumers are \$11.1 trillion in debt, including (October, 2013 data):

\$849.8 billion in credit card debt

\$7.81 trillion in mortgages

\$996.7 billion in student loans

c) “‘Limiting global warming to an agreed U.N. ceiling ‘means that three quarters of the fossil fuel reserves need to stay in the ground, and the fossil fuels we do use must be utilized sparingly and responsibly,’ she said.” (in article “UN Climate Chief Figueres Urges ‘Urgent Transformation’ Of Oil And Gas Industry”; April, 2014)

d) “The world is on the brink of the ‘largest bubble ever’ in finance, because of the undisclosed value of high-carbon assets on companies' balance sheets, and investment managers who fail to take account of the risks are failing in their fiduciary duty to shareholders and investors, Al Gore and his investment partner, David Blood, have said.”

e) “Some might assume that bond markets are shielded from the effects of climate change, ecosystem degradation, and water scarcity. With more than \$40 trillion of sovereign debt in global markets at any given time, that is a very high-risk game....” (in “Sovereign Environmental Risk” by Achim Steiner and Susan Burns; October, 2012)

f) “Again and again, in references to the debt crises, there is mention of the need for ‘economic growth’.... Unfortunately, the kind of ‘economic growth’ which is most often being referred to includes a vast array of ‘enterprises’ which require the continued exploitation of flaws and weaknesses in human

nature, fragile ecosystems, and already significantly depleted natural resources—and which are much of the reason why cultures of violence, greed, and corruption have become so common that most people believe they are inevitable.”

“By depleting the world’s stock of natural wealth – often irreversibly – this pattern of development and growth has had detrimental impacts on the wellbeing of current generations and presents tremendous risks and challenges for the future.”

a) “Ecological Deficit—The level of resource consumption and waste discharge by a defined economy or population in excess of locally/regionally sustainable natural production and assimilative capacity (also, in spatial terms, the difference between that economy/population’s ecological footprint and the geographic area it actually occupies.

“...However, our analysis of physical flows shows that these and most other so-called ‘advanced’ economies are running massive, unaccounted, ecological deficits with the rest of the planet.... These data emphasize that all the countries listed, except for Canada, are overpopulated in ecological terms—they could not sustain themselves at current material standards if forced by changing circumstances to live on their remaining endowments of domestic natural capital. This is hardly a good model for the rest of the world to follow.”

b) “Most economic development and growth strategies encouraged rapid accumulation of physical, financial and human capital, but at the expense of excessive depletion and degradation of natural capital, which includes the endowment of natural resources and ecosystems. By depleting the world’s stock of natural wealth – often irreversibly – this pattern of development and growth has had detrimental impacts on the wellbeing of current generations and presents tremendous risks and challenges for the future. The recent multiple crises are symptomatic of this pattern. Existing policies and market incentives have contributed to this problem of capital misallocation because they allow businesses to run up significant, largely unaccounted for, and unchecked social and environmental externalities.”

c) “If you believe the rate of growth of our economy is going to be what it was in the prior two decades, then there is arguably some justification for kicking the can forward and using borrowed money to cover today’s expenses. If you don’t believe that growth rate is going to be that great, then you have to ask yourself some very fundamental questions ... it requires questioning every assumption you’ve ever made about what is good and worthy in public expenditures(and)... you have to question whether or not everyone, everyone is this whole economic system, isn’t going to have to—to use the vernacular—put some ‘skin in the game’ to avoid a real catastrophe for our federal system.”

9) Deterioration of trust/confidence in institutions responsible for guiding public discourse—and the related loss of social and spiritual cohesion

“... significant, largely unaccounted for, and unchecked social and environmental externalities.”

a) “For most of the 20th Century, and especially since the Second World War, higher education has been largely a secular enterprise. The goal of a college or university education has been to provide

students with scholarly ways of understanding both themselves and the world around them that required little or no appeal to God, religion, or the sacred. The underlying assumption seemed to be that as research and rational reflection explained more and more of the world, religion would become an increasingly unnecessary part of human life. Higher education prepares students for the future, and religion was not particularly relevant for the future as it was envisioned at most universities.”

b) “Popular portrayals of religion often reinforce the view of religion being conflictual. The global media has paid significant attention to religion and conflict, but not the ways in which religion has played a powerful peacemaking role. This excessive emphasis on the negative side of religion and the actions of religious extremists generates interfaith fear and hostility. What is more, media portrayals of religious conflict have tended to do so in such a way so as to confuse rather than inform. It does so by misunderstanding goals and alliances between groups, thereby exacerbating polarization. The tendency to carelessly throw around the terms ‘fundamentalist’ and ‘extremist’ masks significant differences in beliefs, goals, and tactics.”

c) “Because systems of meaning and ways of thinking differ from one culture to another, people from different cultures typically develop different ideas about morality and the best way to live. They often have different conceptions of moral authority, truth, and the nature of community.... These cultural differences become even more problematic when groups have radically different expectations about what is virtuous, what is right, and how to deal with moral conflicts.”

One of the problems:

“They may form negative stereotypes and attribute moral depravity or other negative characteristics to those who violate their cultural expectations, while they ignore their own vices and foibles, perceiving their own group to be entirely virtuous.”

d) “Unfortunately, there are many people in our communities who—regardless of the difficulties and urgencies associated with resolving multiple crises—choose to focus their attention on trying to make money by preying on people’s fears, manipulating people’s trust, and/or encouraging people to abandon hope in higher aspirations, and indulge in unhealthy, or immoral behavior. Such behavior is clearly counterproductive to the building of caring communities; it can be very dangerous for community morale; and it can become a crippling obstacle in times of crises.”

e) “Most economic development and growth strategies encouraged rapid accumulation of physical, financial and human capital, but at the expense of excessive depletion and degradation of natural capital, which includes the endowment of natural resources and ecosystems. By depleting the world’s stock of natural wealth – often irreversibly – this pattern of development and growth has had detrimental impacts on the wellbeing of current generations and presents tremendous risks and challenges for the future. The recent multiple crises are symptomatic of this pattern. Existing policies and market incentives have contributed to this problem of capital misallocation because they allow businesses to run up significant, largely unaccounted for, and unchecked social and environmental externalities.”

“If one can justifiably say that advertising has joined the charmed circle of institutions which fix the values and standards of society and that it has done this without being linked to any of the socially defined objectives which usually guide such institutions in the use of their power, then it becomes necessary to consider with special care the extent and nature of its influence....”

a) "What is basic is that advertising, as such, with all its vast power to influence values and conduct, cannot ever lose sight of the fact that it ultimately regards man as a consumer and defines its own mission as one of stimulating him to consume or to desire to consume.

b) "If one can justifiably say that advertising has joined the charmed circle of institutions which fix the values and standards of society and that it has done this without being linked to any of the socially defined objectives which usually guide such institutions in the use of their power, then it becomes necessary to consider with special care the extent and nature of its influence—how far it extends and in what way it makes itself felt."

"A more equitable distribution of resources is in our best interest for a peaceful future. "

a) "Taken together, the bottom half of the global population own less than 1 percent of total wealth. In sharp contrast, the richest 10 percent hold 86 percent of the world's wealth, and the top 1 percent alone account for 46 percent of global assets."

b) "The United States currently has 5 percent of the world's population, but uses 25 percent of the world's annual energy production. This disproportionate consumption of energy relative to global consumption causes loss of the world's good will and provides a context for potential military conflicts, at the cost of lives, money, and political capital. A more equitable distribution of resources is in our best interest for a peaceful future. "

c) "People in industrialized countries comprise only about 20% of the global population, yet they consume 81% of the world's paper and 76% of its timber."

d) "12 percent of the world's population uses 85 percent of its water."

e) "Were I to have the least bit of knowledge, in walking on a Great Road,
it's only going astray that I would fear.
The Great Way is very level;
But people greatly delight in tortuous paths."

"... people's confidence in state institutions as well as politics... is likely to dwindle even more in societies in which it is already weak – in particular if it is becoming obvious in crisis regions that governments have in the past failed to develop suitable solution strategies and provide orientation for society during this period of transition."

a) "The new reality," says Brown, "is that the world is only one poor harvest away from chaos. It is time to redefine security. The principal threats to our future are no longer armed aggression but instead climate change, population growth, water shortages, spreading hunger, and failing states. What we now need is a mobilization to reverse these trends on the scale and urgency of the U.S. mobilization for World War II."

b) "... it cannot be ruled out that the people's confidence in state institutions as well as politics would be considerably shaken. This confidence is likely to dwindle even more in societies in which it is already weak – in particular if it is becoming obvious in crisis regions that governments have in the past failed to develop suitable solution strategies and provide orientation for society during this period of transition (this writer's italics). This personalised loss of confidence, which can express itself, for example, in 'dressing down' politicians, could – depending on intensity and duration-- consolidate into a general and lasting crisis of confidence towards central national institutions and their ability to solve problems. A society, however, cannot survive without confidence. Sullenness with politics can give rise to lethargy or

fatalism and can increase the likelihood of growing political instability and extremism. Via indirect legitimisation chains, this national loss of confidence could also have a negative impact on the legitimisation, functionality and actionability of supranational organisations and institutions as well.”

c) Confidence (not just confidence in financial markets, but confidence in our viability as a species) will be dimmed by a lack of clarity until there is widespread public discourse on the full dimensions of the critical challenges ahead.

Confidence—in the social, cultural, environmental, economic, and political structures of a society, (or an association of societies, like what we have now, with all its global connections and interdependencies)—is built up when people believe that the efforts of everyone working together is a greater force than the challenges they are facing.

d) “Widespread cynicism that many of the critical challenges of our times will not be resolved could become a crippling factor which may undermine many positive and constructive solution-oriented initiatives, which would have otherwise led to positive tipping points.”

e) Consider the following thought experiment:

For the 10 critical challenges in this list, choose a statement for each challenge [from the following two lists of choices (for plans, and confidence of success)] which best corresponds to how you feel about your local community’s efforts to resolve these challenges.

Plans

- I believe we have a relevant, practical, and doable action plan for resolving this challenge.
- I believe we are taking the steps necessary to develop a relevant, practical, and doable action plans for resolving this challenge.
- I am not sure if we know how to resolve this challenge.
- I do not believe we know how to resolve this challenge.

Confidence of Success

- I am confident we can resolve this challenge
- I believe we are moving in the right direction to resolve this challenge.
- I am not sure if we will be able to resolve this challenge.
- I have no confidence in our ability to resolve this challenge.

10) Sorting out what are real challenges and what are sound and practical solutions is becoming more and more difficult—as there are now, in most communities of the world, a multitude of ideas of all kinds coming to the fore in personal, family, community, and cultural life—all at the same time. Thus, even analysis supported by much credible evidence—that there are many danger signs flashing now (involving significant threats to ecological stability and social cohesion)—can be easily lost amidst a swirl of misinformation, other more trivial information, and the “siren song” of multiple entertainment venues.