

Table of Contents

Introduction -----	Page 3
Counting it wrongly-----	Page 4
An unravelling global economy-----	Page 5
A new sustainability-based economic paradigm -----	Page 7
Need for a global consensus-----	Page 8
The new Bretton Woods -----	Page 9
Towards full-cost national accounts-----	Page 10
The big leap -----	Page 10
Creating a happy and sustainable human society -----	Page 12

Introduction

In June, 1992, in Rio de Janeiro, the world's assembled leaders vowed to "cooperate in a spirit of global partnership to conserve, protect and restore the health and integrity of the Earth's ecosystem" (*Article 7*). In order "to achieve sustainable development", they further pledged to "reduce and eliminate unsustainable patterns of production and consumption" (*Article 8*).

On the same occasion, the Rio partners adopted the landmark Framework Convention on Climate Change, whose declared objective was "stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system."

Now, 20 years later, we should be gathering to celebrate our progress towards attaining these vital and noble goals, on which our future survival literally depends. Instead, sadly, it is a time for tears. It is a time for deeply sober reflection on our failures to meet the Rio aspirations of 20 years ago, and on our blind progression on a dangerously unsustainable path that threatens the survival not only of our own but of many other species of life on Earth.

Instead of progress, we have perilously accelerated ecosystem decline. In the 1990s, CO₂ emissions increased by an average of 1.1% per year. Since 2000, they have increased by more than 3% per year. The UN Millennium Ecosystem Assessment, based on the best and most comprehensive scientific evidence available, concludes that two-thirds of the world's ecosystem services are now in serious decline. And ecological footprint assessments show that humanity is now using up natural resources at a 35% faster rate than nature can regenerate.

And we know too that this ecological destruction is not separate from global economic realities that are increasingly dividing rich from poor: —

- that 20% of the world's people consume 86% of its goods while the poorest 20% consume just 1.3%;
- that the richest 20% use 58% of all energy and the poorest 20% less than 4%;
- that 20% of people produce 63% of the world's greenhouse gas emissions while another 20% produce only 2%;
- that 12% of the world's people use 85% of the world's water;
- that the richest 20% consume 84% of all paper and have 87% of all vehicles, while the poorest 20% use less than 1% of each.

The stress of poverty on countless millions of our fellow human beings is no less than the stress on the planet of the lifestyles of the rich.

This is neither the time nor the place for a detailed litany of the world's environmental woes or of its gross inequities. We are all too familiar with the news of melting icecaps and receding glaciers, resource depletion, species extinction, preventable disease, war, famine, and more.

But this 20-year marker is certainly the appropriate historical moment to acknowledge that we literally cannot afford another 10 years on the same trajectory as since Rio 1992. Business as usual is certain doom for the world – or at least for the habitability of the planet by human beings and many other species.

And so it behoves us now to take a brutally honest look at why we have been so shockingly incapable of implementing the noble aspirations of Rio 1992, and it particularly behoves us **not** to fall into the same trap again. If we care at all about this precious planet that sustains us, there is much at stake in this analysis and the actions we now take.

Counting it wrongly

It is now clear that a fundamental impediment to progress towards the Rio 1992 goals is that we have been measuring progress wrongly, and that our present progress measures are sending distorted signals to policy makers worldwide:

- Our present GDP-based measures, in which economic growth is mistakenly seen as synonymous with wellbeing, literally report more fossil fuel combustion (and therefore more greenhouse gas emissions) as economic gain.
- The faster we cut down our forests and haul in our fish stocks to extinction, and the more excessively we consume and deplete resources, the more GDP grows. But is that really “progress”?
- Even pollution, crime, war, sickness, and natural disasters make GDP grow, simply because these ills cause money to be spent.
- And GDP measures don't even help us measure progress towards Rio Principle 5 on “eradicating poverty as an indispensable requirement for sustainable development,” because GDP can grow even as inequality and poverty increase.

If we continue to measure progress like this, then Rio + 40 will be a tale of woe and disaster so grim that course correction will no longer be possible. This prognosis is not overly dramatic but is based on the best available science.

Nor is our failure to achieve the Rio 1992 goals a matter of blame. When the Bretton Woods conference of 1944 enshrined GDP as the global accounting system, and created institutions like the World Bank and International Monetary Fund to regulate the present global economic system, economists did not consider that nature's capacity to support human economic activity might have limits. Not even the most renowned

scientists knew that human activity could change the climate of the planet earth, let alone that climate change would become “the greatest challenge facing humanity,” in the words of the UNDP.

Today we know better — much better! In fact, we know **so** well that we can no longer hide behind the veil of ignorance that obscured the vision of the 1944 Bretton Woods architects. If we are to understand our failure to meet the 1992 Rio objectives and remove the key impediments to genuine progress, it is the economic system itself, based on long out-dated assumptions, at which we must take aim.

And we have no choice. We simply will not undertake the massive greenhouse gas emission reductions required to stave off impending catastrophe for life on earth, and to stabilize atmospheric greenhouse gas concentrations for the first time since the Industrial Revolution, under the present economic paradigm that propels us steadfastly in the opposite direction.

We need nothing less now than a new sustainability-based economic paradigm, with new progress measures, accounting systems, and regulatory institutions, if we are to save humanity and avert disaster. We have a narrow window of opportunity before it is too late.

An unravelling global economy

The good news is that the time to adopt that new paradigm has never been better, simply because the existing economic system is unravelling of its own accord. As Thomas Friedman wrote in *The New York Times* on 7 March, 2009:

What if the crisis of 2008 represents something much more fundamental than a deep recession? What if it's telling us that the whole growth model we created over the last 50 years is simply unsustainable economically and ecologically and that 2008 was when we hit the wall—when Mother Nature and the market both said: “No more.”

While definitely trying to ameliorate its impacts on the most vulnerable, we should also regard the unravelling of the global economic system since 2008 as a tremendous opportunity. With dramatic abruptness, major banks failed, iconic symbols of prosperity like General Motors went bankrupt, the stock market collapsed, life savings disappeared, the ranks of the unemployed swelled, Europe is foundering in a gigantic debt crisis, the U.S. is deeply indebted, and 15 years of sustained economic growth suddenly morphed—seemingly overnight—into the worst global economic downturn since the Great Depression.

But what proved bankrupt in 2008 was not only a failed economic paradigm but its most eminent theorists and practitioners, and the accounting system that sent them the wrong messages. The real moment of truth came when Alan Greenspan, former head of the U.S. Federal Reserve and chief of all bankers, confessed before Congress that he'd been fatally wrong in his prescriptions for the economy, and that he, economic guru of gurus, had no inkling of the impending financial catastrophe.

And yet, as so often happens when things fall apart, those with the greatest stake in the existing system mustered their troops in 2008-09 for one last stand. With critically flawed accounts and progress measures and an armoury correspondingly bereft of ideas, the defenders could only fight fire with fire, combating a collapse spurred by debt-fuelled growth with yet more debt-fuelled growth. It was a recipe for disaster.

Not only did the massive fiscal stimulus packages of 2008–2009 predictably fail to stimulate in the longer term, but they hastened the systemic collapse. The impending double-dip recession is now being ushered in with high unemployment rates and unprecedented national deficits. No more stimulus or bailouts now. The clarion call has changed from “stimulus” to “deficit reduction.”

Not surprisingly, social unrest is brewing from Greece to London to occupying Wall Street movements. Even during the prior two decades of apparent prosperity, young people lost ground, saw their median incomes drop and their debt loads increase, and even voted less—a sure warning sign of growing alienation from the established order.

And on the sidelines, analysts like George Monbiot have noted that “climate breakdown, peak oil, and resource depletion will all dwarf the current financial crisis, in both financial and humanitarian terms.” In fact, the very measures taken in 2008 and 2009 to get the economy back to where it was—designed to promote infinite growth on a finite planet—are a recipe for ecological disaster.

And, wrote Monbiot in the *Guardian*, “When the world’s ecological debt comes due, no World Bank or IMF bailout package will save the day.” For the first time since the Industrial Revolution, it is clear that the next generation will not be better off than previous ones—economically, socially, or ecologically.

And so now, at last, as we take stock of Rio + 20, with an intensely shaky global economy and governments themselves deeply indebted and teetering on bankruptcy, the world *is* at last searching for a genuine cure. And, at last, both leaders and economists seem genuinely ready to listen. That indeed is good news!

In the midst of the 2008–2009 emergency rescue packages—approved with stunning rapidity by an almost global consensus—that openness to a sane path forward did not exist. But now at Rio + 20, the world may at last be ready to explore other solutions.

If Rio + 20 dares to look deeply and honestly, as it must, and to take the necessary leap to a new Bretton Woods — a new economic paradigm based on what we now know to be true — then this moment of ecological and economic crisis may be our greatest opportunity.

A new sustainability-based economic paradigm

But there is more good news at this moment in history. Theory is not enough now. We need — and indeed we have — living examples of what can work, of sustainable production methods, appropriate technologies, communities that are not spiralling downwards into depression and fear but living prosperously *and* in harmony with nature, and who are—dare we say it—happy. On every continent, we have outstanding models and best practices worldwide — organic farmers, sustainable foresters, community cooperatives, and more — the seeds of the new economic paradigm.

We even have well-developed measurement systems of wellbeing with robust methodologies and good data sources, including our own made-in-**Bhutan Gross National Happiness (GNH) index with its nine domains and 72 core indicators**. And we have new accounting methods developed by brilliant ecological economists that include robust measures of natural and social capital — measures that enable us to move beyond the narrow **GDP-based measures** of the past to give us a much more comprehensive and accurate picture of our true wealth and progress.

In short, we have at our fingertips all that we need to create the new economic paradigm on the ground, in policy, in measurement, in accounting, and in regulatory institutions. All that is needed is the political will. Nothing practical is stopping us doing exactly what is needed to ensure that Rio + 40 is a true celebration and not a veil of tears and gloom.

Bhutan is a small Himalayan country, perhaps blessed with relative insignificance, just remote enough not to be entirely hooked to the materialist bandwagon, and small enough—with a population of less than a million—to do its best to put the new economic paradigm into action. In fact, we are determined to do so.

We are a country with a strong spiritual tradition and an ancient culture of respect for all living beings, with strong communities and social bonds, with our old-growth forests still intact, with half the country under complete environmental protection, and with an official policy to grow all of our food organically — and with the goal of becoming the first country in the world to be 100% organic.

We are a country that vowed at the Copenhagen Climate Summit to remain a net carbon sink in perpetuity, and whose Fourth King famously proclaimed three decades ago that “Gross National Happiness is more important than Gross National Product.”

Need for a global consensus

And yet, there are major limits to what we can do alone. After all, we are not separate from the world around us. We are connected to the internet, television, global trade, and all the consumerist temptations they bring. And greenhouse gas emissions in Chicago, London, and Sydney are melting glaciers in our own Himalayan mountains. We are more than willing to be on the front lines in adopting the new sustainability-based economic paradigm, but we are now intimately connected with the world, and so we need to take this leap as a global community.

A heart warming sign that the world is at last ready to take that leap in concert is the July 2011 UN General Assembly resolution A/65/L.86 on “Happiness: towards a holistic approach to development,” introduced by the Kingdom of Bhutan with support from 68 Member States, and unanimously adopted by the 193-member United Nations. Echoing the language of Rio 1992, this resolution acknowledges that unsustainable patterns of production and consumption can impede sustainable development, and it urges a more inclusive, equitable and balanced approach to economic development that promotes sustainable development, poverty eradication, happiness and the wellbeing of all peoples. In other words, this very recent UN resolution calls for precisely the holistic and humane policies and measures that will characterize the new sustainability-based economic paradigm.

If we are to avoid deeper human suffering and ensure true societal progress, we need to act now before a frightened world spirals down into insecurity, conflict, and disarray. We cannot wait for once secure and reliable global food and energy supply lines suddenly to be cut as fearful leaders worldwide throw up protective barriers and citizens hoard diminishing supplies.

We need to re-think our entire globalized growth-based economy and consider retooling our economies so that we can thrive more effectively on our own resources in harmony with nature, so that we can stave off impending food shortages and feed our own people while nurturing a genuine quality of peace and security in which our people live happily.

We do not need to accept, as inevitable, a world of impending climate chaos and financial collapse. And yet analysts are already using that language. A single day’s London newspaper in 2008, describing the financial collapse, talked of a world shuddering and “hunkering down” in “fear,” “panic,” “gloom,” “despair,” and “resignation,” gripped by unfolding “threat” and “disaster.”

Small, remote, and insignificant as we are, our little Himalayan country—at this seminal Rio + 20 historical moment—deeply wants to offer something that might be practical and

useful to the world, if for no other reason than that our hearts ache at the pain and suffering of a planet and species in crisis.

The New Bretton Woods

And so, the Kingdom of Bhutan wishes to invite the nations, economists, and ecologists of the world to come together in hammering out a new international consensus on a new sane, sustainability-based global economic paradigm, based on the best available scientific and expert knowledge. It will be a new Bretton Woods to replace an out-dated system that simply no longer works either for the planet or for people.

The new system will require new measures of progress and new national accounts that value our wealth properly and comprehensively (including natural capital and its depletion and degradation), and that properly account for the full benefits and costs of economic activity. And—just as Bretton Woods 1944 established the World Bank and IMF to manage the old growth-based economic paradigm—so the new Bretton Woods will require us to re-design and refashion these global institutions to manage and regulate the new system and ensure proper implementation.

All this will take two years of hard work. And then, in the summer of 2014, Bhutan would be honoured to host the global gathering that adopts the new protocol and economic paradigm.

As mentioned above, the Bretton Woods system of 1944 enshrined GDP as the global measure of progress and prosperity and created institutions to manage a system predicated on limitless growth. This system was constructed before the world had any awareness that its natural resources were finite and is, as we now know, based on untenable, self-defeating economic premises.

By contrast, we now need to create sustainable local economies that are not fuelled by endless desire and simply producing and consuming more stuff, as is our present globalized system, but rather by what people genuinely need in order to achieve decent living standards and to fulfill their human potential. The world already has enough in aggregate. In fact, we have plenty! We now need to shift our attention to how to distribute that wealth fairly to ensure no one is deprived.

Let's take a few very concrete examples of how the new economic paradigm might handle common challenges in very different ways than does the present system. The following, at least, signify Bhutan's intentions.

If a new global depression hits, as is increasingly likely, if our markets dry up and our economies shrink, our first concern in the new paradigm must be to make sure no one gets unduly hurt. Full-cost accounting systems, which account fully and properly for the

value of our natural, human, and social capital, and which must be part of the new economic paradigm, show that unemployment produces huge illness, crime, addiction, and other costs. And so, in the new economic paradigm, we will try not to lay off anyone at a time of crisis. Instead we would redistribute work so that all people work shorter hours. They might even appreciate having more time with family and friends and more time to contemplate, volunteer, build relationships and enjoy themselves.

Towards full-cost national accounts

Most importantly, full-cost national accounts will, in all probability, show us clearly that our economy is only as healthy as the ecosystem services and natural resources that sustain our life on earth and which we need to power our economy. If we destroy our soils, forests, water, and other natural wealth, which provide invaluable services to our people, our economies and our people will die. And so our national accounts will value our natural capital fully, and properly account for the impacts of economic activity on nature's services. Based on such evidence (currently missing in our conventional accounting mechanisms), the new sustainability-based economic paradigm will create an economy in full harmony with nature.

We had a superb example of the power of full-cost accounts in 2006 when Lord Nicholas Stern, former Chief Economist of the World Bank, in a seminal 700-page report, proved decisively that the benefits of early preventive action to avoid the worst of the damage wrought by climate change far outweigh the short-term economic costs of such action. While conventional accounts only consider the immediate costs of emission reductions, Lord Stern's full-cost accounting work looked at both sides of the equation to quantify also the benefits of damage avoidance. This was a brilliant example of the new accounting mechanisms that will mark the new sustainability-based economic paradigm.

One key feature of the new economic paradigm is also that it will be basically local in scale. We in Bhutan intend to grow enough food to feed ourselves, and it will be healthy and nutritious because we will grow all of it organically. We intend to provide all our basic energy domestically from renewable sources, along with as many of our core necessities as possible. And we intend to be a true 'zero waste' society.

We aspire to motivate most of our people to walk to work, and we envision our new economy providing free public transport and van pools for those who need a ride. In these and other ways, we should not hurt even if food supply and energy lines were to collapse. Our economy will be resilient and sustainable.

The Big Leap

It may not be appropriate for a little country like Bhutan to dare to offer advice to the world. But at a time of economic fear, insecurity, and recession, it's important for us to

acknowledge that the world actually has plenty of resources and that we are already producing enough to feed and supply everyone in this world.

Continuous economic growth and expansion in our finite world is not a must. In fact, this global economic slowdown presents a great opportunity — a chance to give nature a rest, to consume less energy and fewer resources, to emit less greenhouse gases, to reduce stress, to have more free time, to become more secure and self-reliant, and to improve the quality of our lives.

Full-cost national accounts will very clearly show that the global economy has grown too large and that we are already globally consuming resources at a rate too fast to allow them to regenerate. In fact, shrinking the global economy creatively, i.e., without reversing genuine development, is essential for human survival on the planet.

And this is good news from a human point of view. Bhutan's own new measures of progress and GNH index already clearly show that producing and consuming more stuff doesn't make people happier. On the contrary, when they overwork and go into debt to buy ever more goods and pay the bills, they get more stressed.

Renowned economist Dr. John Helliwell at the University of British Columbia showed that the strongest correlate of happiness is not income but strong social bonds. So, working, producing, and consuming less is not only good for nature but gives us more time to enjoy each other's company.

If we are to learn anything from our failure to achieve the 1992 Rio goals, and if we are to change course so that we can genuinely celebrate Rio + 40, we as a global community must assiduously use the next two years to create a healthy new global economic system based on caring for nature and for each other.

As we have already begun to do in Bhutan with our GNH Index and our emerging new National Accounts, we will need new measures of progress that count the value of *all* our wealth—natural, social, human, and economic. And we'll need new global regulatory mechanisms that entirely **re-design and refashion institutions like the IMF and World Bank**—new systems of fair trade, of rewards and incentives for sustainable behaviours, of penalties for pollution and resource degradation, and of protection and support for the world's most vulnerable peoples.

Those new measures and systems will protect us from the kind of fear, despair, and crises that is now roiling the world. Because the new global economic system will use a *net* rather than a *gross* accounting system, our new measures will properly assess the costs of production and provide early warning signals that allow timely remedial action. For instance, if our natural capital accounts show a decline in fish stocks, we'll take preventive action before the resource collapses.

Indeed, with good progress and accounting measures, we would not have been surprised at all by the present global economic slowdown because, unlike GDP that counts only **gross** income, production, and consumption, **net** accounting mechanisms would have shown that debt has been growing globally at a much faster rate than income. Sooner or later, as the subprime mortgage crisis that precipitated the present global collapse showed, it would have become obvious that debtors would default on their payments. And when governments went deeply into debt in 2008-09 to try to fuel more growth, these new full-cost accounts would have clearly predicted the present disaster of national defaults.

Creating a happy and sustainable human society

We, as human beings, are smarter, and can do better—much better—than we have done in creating a secure, sustainable, harmonious, peaceful, and happy economy and society. We must take this shaky moment in human history as a tremendous opportunity to forge a sane path forward together.

If we can do the preparatory spade work together over the next two years, as mentioned above, the kingdom of Bhutan wishes to invite and host the nations of the world in 2014 at an historic meeting that will officially replace the 1944 Bretton Woods consensus that has ruled the world for nearly 70 years, with a new historic global accord on a genuine sustainability-based economic system.

By end 2015, we'd anticipate that natural and social capital values will be fully and properly incorporated into national income accounting worldwide. Finally, politicians will have the tools and evidence they need to reverse decisively the calamitous global warming and resource depletion trends that now constitute the greatest challenges humankind has ever faced, and to build economies in full harmony with nature. Indeed, there is no better moment to begin that process than right now — during this historic Rio + 20 appraisal.

Dealing directly with the economic system in this way — dismantling the old and creating the new consensus — is the only way we will finally stem the deadly tide of climate change, resource depletion, and ecological degradation. It is the only way in which we can create a good society based on sufficiency, equity, sustainability, and dignity.

We have no time to waste. If we are to gather in Rio in another 20 years to celebrate our triumph in turning around our present suicidal course, then we must begin immediately to create the **new economic paradigm**, to take the value of natural capital, ecosystem services, and social wellbeing fully into account, and begin to chart a sane and sustainable path into the future.

Bhutan is confident of this path, which is fully in line not only with our ancient values, culture, and wisdom traditions, but with our largely pristine natural environment and with our new GNH-based measures of progress. Indeed, we are determined to pursue this path!

But every nation is a part of a much larger world bound together by a common future and fate indeed. No single country can reap the full benefits of adopting and implementing the new sustainability-based economic paradigm, unless all of humanity acts collectively and in harmony as one community. Surely, our past failures and our present tears will give us cause to do so.

Note: Some materials for this submission were adapted with permission from an article on Bhutan's vision for a new sustainability-based economic paradigm, titled "The Great Turnaround: How Natural Capital Entered the Economy," which appeared in the October, 2011, Solutions journal (www.thesolutionsjournal.com).