

The Parable of the Pump Tinkerers—a tale of fatal misperceptions caused by limited perspectives

Once upon a time, in a far away land...

...there was a small and prosperous town whose only source of water was a single pump, which was fed by a single well. Because the town's water supply system had been constructed long before any of the then-living townspeople were born, its overall operation was not very well understood.

While the townspeople were very familiar with the operation of the pump, which they could see and touch; they were far less familiar with the operation of the well, which was under ground and was essentially "invisible" to them.

Fortunately for the townspeople, it was not necessary that they understood how or why their well worked. The town's water supply had been more than adequate for over 100 years, and the townspeople simply assumed that it would remain so forever.

Regrettably however, after more than a century of abundance, the water flow from the town's pump had undeniably begun to decline. The town's elders could recall days when water gushed from the pump, and even the middle-aged townspeople remembered when the flow rate was much greater than it had become.

Because the town's abundant water supply had enabled its population level and material living standards to increase substantially over the years, the declining water flow was of paramount concern to the townspeople. So the town leaders sprang into action—they put their best local pump experts to work.

The pump experts replaced every working part on the pump with new parts derived from the latest technology. They even made the new pump several times larger and installed a "rapid action" handle in order to increase the pump's water pumping capacity. But the water flow from the pump continued to decline.

So the town leaders enlisted the support of the best pump experts in the land, who installed an even larger, faster, and more technically advanced pump—at a cost that severely impaired the town's economy. Yet the water flow from the pump continued to decline. The townspeople were dumbfounded—and increasingly impoverished and thirsty!

One day, a traveler with a broader perspective came to the town. He watched in amazement as the townspeople busied themselves with initiatives and activities intended to increase the water flow from their town's pump. After awhile he asked the townspeople – "why do you insist on tinkering with your pump, when your real problem is that your well is running dry"?

The visitor was initially ignored by the townspeople, but was ultimately asked to leave the town because the local leaders felt that he was distracting the townspeople from their efforts to construct a new "mega-pump", which would surely fix their water supply problem.

Predictably, it did not; and nobody lived happily ever after...

Today, in a land all-too-close-to-home...

...increasingly large segments of our industrialized global population are experiencing declining material living standards resulting from slowing, flat, or declining economic growth in their respective countries.

Insufficient Economic Output (GDP) → Declining Material Living Standards

Unfortunately, as was the case with the townspeople who, owing to their limited perspectives, believed erroneously that their water supply problem was caused by a defective pump; we, owing to our limited perspectives, believe erroneously that our persistent economic malaise is caused by our defective national economies.

Consequently, we believe that we can resolve our economic malaise—i.e., reverse the adverse economic growth trends and declining material living standards that we are currently experiencing—by “fixing” our “broken” national economies. That is, we believe that we can restore continuously improving material living standards for our ever-increasing global population by implementing “the proper mix of enlightened economic and political policies and initiatives”.

We are mistaken...

The fundamental cause underlying our “predicament” is not economic or political; it is ecological—ever-increasing nonrenewable natural resource (NNR) scarcity. Our enormous and continuously increasing NNR requirements are manifesting themselves within the context of increasingly constrained—i.e., increasingly expensive, lower quality—NNR supplies.

Insufficient NNR Input (NNR Scarcity) → Insufficient Economic Output (GDP) → Declining Material Living Standards

Our persistently deteriorating economic circumstances are merely manifestations of our predicament—they are symptoms, not the disease.

Our economic and political policies and initiatives—consisting primarily of fiscal stimulus (debt) and accommodative monetary policy (money printing)—“worked” historically for industrialized nations in the West because sufficient economically viable NNR supplies existed globally to enable NNR deficient nations, such as the US, to import sufficient incremental NNRs from foreign nations to overcome domestic shortfalls.

These “fixes” no longer “work”, and they will never work again, because NNR scarcity has become a global phenomenon.

Globally available, economically viable NNR supplies are no longer sufficient in an increasing number of cases to completely address our enormous and continuously increasing global NNR requirements. As a result, there are no longer sufficient economically viable NNRs available for export to NNR deficient industrialized and industrializing nations—especially nations that offer in exchange only unrepayable IOUs and continuously devaluing fiat currencies.

Our well is running dry...

Permanent Global NNR Scarcity → Permanently Insufficient Global Economic Output (GDP) → Permanently Declining Material Living Standards (Initially in the Industrialized West)

The Moral of the Story...

Since the inception of our industrial revolution over 200 years ago, we in the industrialized and industrializing world have been able to live increasingly beyond our means ecologically through our ever-increasing utilization of NNRs—the fossil fuels, metals, and nonmetallic minerals that serve as:

- The raw material inputs to our industrialized economies;
- The building blocks that comprise our industrialized infrastructure and support systems, and
- The primary energy sources that power our industrialized societies.

Moreover, during the past several generations, we in the industrialized West have been able to live even further beyond our means ecologically by living beyond our means economically as well, through our ever-increasing reliance on pseudo purchasing power.

Pseudo purchasing power—fiscal profligacy—enables us to increase our procurement of NNRs and derived goods and services, thereby increasing our “current” material living standards, by:

- Liquidating our previously accumulated economic wealth reserves—e.g., depleting our savings, “cashing out” our home equity, and selling our physical assets;
- Exchanging ever-increasing quantities of fiat currency—“printed money” that has no intrinsic value—for real wealth;
- Incurring ever-increasing levels of unrepayable debt—at the personal, corporate, and government levels; and
- Underfunding investments critical to our future wellbeing—e.g., “social entitlements”, pensions, retirement accounts, and infrastructure upgrades and maintenance.

Unfortunately, our ecological behavior and economic behavior, which have been “successful” since the inception of our industrial revolution, are unsustainable—as is our resulting industrial lifestyle paradigm—because they are enabled by enormous quantities of finite, non-replenishing, and increasingly scarce NNRs.

More unfortunately, our industrial lifestyle paradigm is in the process of unraveling NOW, because NNR scarcity, which was historically a national phenomenon, has become a global phenomenon. **There are not enough globally available, economically viable NNRs to completely address our global NNR requirements going forward.**

We must broaden our perspectives...

When viewed from the broader ecological perspective, our economic and political policies and initiatives are irrelevant because none of the economic and political expedients that we employ can create additional economically viable NNRs—the “affordable” fossil fuels, metals, and nonmetallic minerals upon which our industrialized existence depends.

Like the townspeople in the far away land, we are squandering our remaining time and resources in futile and misguided attempts to address the symptoms associated with our predicament.

Unlike the townspeople however, who, had they possessed a broader ecological perspective, might have resolved their predicament by drilling a new well, no such recourse is available to industrialized humanity. There are no “untapped” sources from which we can obtain sufficient economically viable NNRs to perpetuate our industrial lifestyle paradigm; there is only one earth.

The material living standards associated with increasingly large segments of most industrialized Western nations are declining not because our national economies are “broken”, but because our national economies are “dying of slow starvation” for lack of sufficient economically viable NNR inputs.

Our Unhappy Ending...

Absent an “intelligent response” to our predicament, our economic circumstances will continue to deteriorate and our material living standards will continue to decline going forward, culminating in global societal collapse—almost certainly by the year 2050—despite our incessant barrage of misguided and inconsequential economic and political “fixes”.

And nobody will live happily ever after...

Chris Clugston Bio

Since 2006, I have conducted extensive independent research into the area of “sustainability”, with a focus on nonrenewable natural resource (NNR) scarcity. NNRs are the fossil fuels, metals, and nonmetallic minerals that enable our modern industrial existence.

I have sought to quantify from a combined ecological and economic perspective the extent to which America and humanity are living unsustainably beyond our means, and to articulate the causes, magnitude, implications, and consequences associated with our “predicament”. My research culminated in the publication of *Scarcity – Humanity’s Final Chapter?* (Please see www.nnrscarcity.com for additional information.)

My previous work experience includes thirty years in the high technology electronics industry, primarily with information technology sector companies. I held management level positions in marketing, sales, finance, and M&A, prior to becoming a corporate chief executive and later a management consultant.

I received an AB/Political Science, Magna Cum Laude and Phi Beta Kappa from Penn State University, and an MBA/Finance with High Distinction from Temple University.