

# **OPINION:**

## Only degrowth can save us

The world's obsession with more wealth, more produce, more comfort etc. has created the conditions for a planetary climate that threatens to collapse, and an inflationary global economic system stuck in an ever-worsening debt spiral. To save the planet, and the economy, only degrowth can save us.

Degrowth means the controlled adaptation to the Earth's natural limits (which today are exceeded by far). By the beginning of April, Sweden had already exhausted its share of the Earth's resources. The remaining months we steal from future generations as if we had 4 Earths (South Africa would need 2.5 Earths). Today, there is a naïve and dangerous overconfidence, for example among lightly disguised lobbyists for the fossil fuel and nuclear industries, that mere technological solutions will save us – one example out of many being artificial CO<sub>2</sub> capture, which in reality cannot bind a fraction of the billions of tons per year that would be required.

The report "Limits to Growth", based on several simulation scenarios at MIT in 1972, was heavily criticised from the outset by industry leaders and economists, despite the fact that its most pessimistic scenario, "Business as

usual" – where a global collapse occurs around 2050 as a result of increasing ecological pressures in the first half of the 2000s (just what we see today) – has proved to fit the world's real development frighteningly well since then. The dream that "new technology" could save us is also included as a simulation scenario, "Comprehensive technology", but only extends the deadline by a few years, while the collapse becomes even worse when it inevitably comes. Mere "green industry" – the new favourite slogan of business and politicians – unfortunately will *not* save us.

Degrowth is also included as a simulation scenario ("Stabilised Earth"), the *only one* of all 12 that does *not* lead to collapse, but unfortunately does not match the actual evolution of the world. It is crazy to think that what has plunged us into today's crisis – uncontrolled technological "development" and exploitation driven by unbridled,

increasingly unequal, galloping raw capitalism – will save us: If you are sitting on a tree branch you are sawing off, and the ground underneath is burning, the solution is *not* to switch to a better saw – it is to stop sawing. And don't send economists to put out the fire (why not "firefighters"? – with knowledge of how nature actually works).

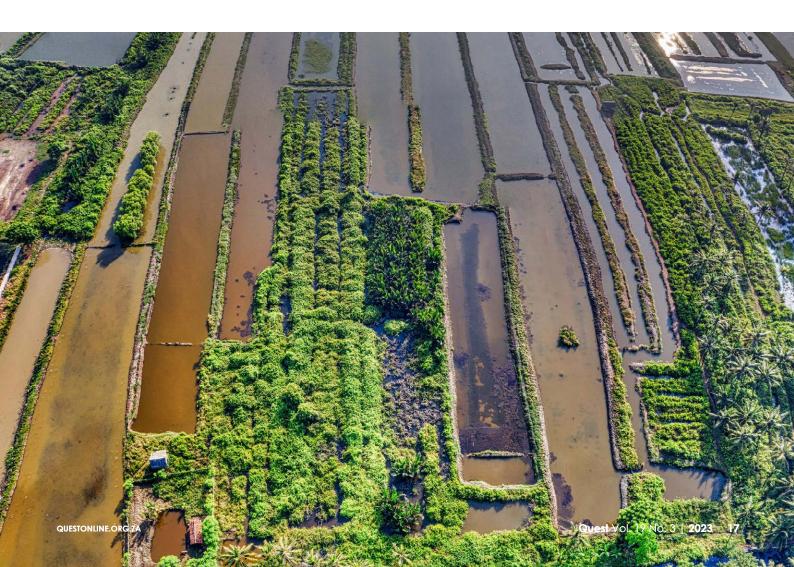
It is a tragic fact that the world today in practice is governed exclusively by economists and economic considerations. Economics is not a natural science, but just a human invention. ("The Nobel Prize" in economics does not exist; it is a prize invented by the Swedish Central Bank (Sveriges Riksbank) to celebrate its own 300th anniversary in 1968 "in memory of Alfred Nobel".) Even so, there are purely physical limits to economics that most economists do not seem to understand.

Seen from space, it is obvious that the earth is a rather small, isolated, and vulnerable spaceship – then some economists may mistakenly rant about "decoupling" of the economy from the real and strictly limited assets best they want. Even pure "information" has physical limits. Just as the exponential growth of bacteria in a Petri dish dies off when nutrients and space run out, there are non-negotiable limits to "growth" also for humans on Earth. And just like viruses and bacteria, fast-forwarding humanity's last centuries would show how we and our

economy first are growing slowly, but exponentially, and today are well on our way to destroying the living conditions of the entire planet – at least for mankind. Rats and cockroaches usually survive.

Nature does not care one bit about our economic considerations and calculations when it decides how to exterminate humanity. Economic growth was from the outset meant to help people, for example lift them out of poverty. But today, humanity has instead become a slave to the sacred growth – which has become an end in itself, a monster completely out of control. The concept of GDP was invented in 1934 by Simon Kuznets, but he *himself* warned against using such a crudely simplified concept as some kind of naïve numerical measure of welfare in an extremely complex world.

In one indigenous civilisation, people thought about how at least seven generations into the future would be affected before important decisions were made. In contrast, politicians today have a time perspective of four years (next election) and industry/business/ shareholders only three months (next quarterly report). For example, what moral right do we have to convert the small amount of uranium on Earth into "eternal" extremely hazardous waste – a process hazardous at all stages – for just a few decades of electricity for the "growth" of our





generation? About as little as we had to burn up a large part of the planet's fossil fuels in just over 100 years, which had taken 100s of millions of years to be created, and whose previously bound carbon has now ended up in the atmosphere as carbon dioxide and disrupted the climate.

Renewable energy is potentially so much larger in magnitude (and also much cheaper) that most people who are "in favour" of nuclear power can hardly have a clue about how it works, its limitations and real dangers.

Role models like Greta Thunberg are not only trying to save other climate "activists" (should be called climate *realists*) but also all those who, for some reason, have not yet understood how serious the situation actually is. To reach the 1.5-degree target, *all* use of fossil fuels must have completely ceased by 2035, while *all* deforestation must have been been stopped, and all other greenhouse gas emissions must have been drastically reduced. "Growth" is still spelled in terms of fossil energy: "84% of the world's energy today comes from fossil fuels." (International Energy Agency).

Only degrowth can save us. And degrowth is also inevitable. The only thing we can influence is whether it will be planned and controlled, or forced and catastrophic (global collapse):

1. Perpetual growth is impossible in a finite world. Our "one-time inheritance" of fossil fuels - created by the Sun and deposited as a "solar battery" charged over 100s of millions of years – is what really has driven the explosive exponential growth of the last century but will soon be gone forever. The overexploitation of this "fossil" stored solar energy, besides creating the climate emergency, enabled industrialisation and brainwashed generations of economists into believing that growth could continue forever. Increased energy consumption and economic growth have always gone hand in hand. To illustrate the impossibility of perpetual growth, let us assume a "modest" annual growth rate of 2.3% (less than the average since 1850), which means a tenfold increase every 100 years. In two hours, as much solar energy reaches the Earth as all of humanity today consumes in an entire year. But this "modest" growth means that we would be using all incoming

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solar energy in just over 300 years (a blink of an eye in humanity's history), the *total* energy of the whole sun in just under 1,300 years, and the energy of *all 100s of billions of stars in our galaxy* in just 2,400 years. The laws of thermodynamics then say that the Earth's average temperature would be body temperature (well above deadly) in 300 years, the boiling point in 400 years, the melting point of steel in 700 years, and as hot as the surface of the sun in 900 years. Note that this is *regardless* of the energy source we use: fossil, nuclear (fission/fusion), renewable or even hypothetical energy sources we don't even know about yet. Politicians, industry leaders, journalists or economists – irrespective of their name or how famous they are – cannot do anything about the laws of nature.

- 2. In 1992, more than 1,700 of the world's most prominent scientists, including the majority of then living Nobel Laureates in the natural sciences, wrote "World Scientists' Warning to Humanity" to all world leaders: "No more than a few decades remain before the chance to avert the threats we now confront will be lost and the prospects for humanity immeasurably diminished... Current economic practices cannot be continued. Developed nations must greatly reduce their overconsumption". Nothing happened. In 2017, the sequel "Warning to Humanity: A Second Notice" came with the same message: "Soon it will be too late to shift course... and time is running out". Nothing happened this time either.
- 3. As early as 1972, the harrowing report "Limits to Growth" was published, the message of which was that humanity was heading for catastrophic overconsumption and subsequent collapse around 2050. Why have people today foolishly begun to discuss mining at the bottom of the sea? Well, because the resources above ground have begun to run out, which was predicted as early as 1972. If global changes had been introduced back then, when the Earth's resources had barely been exceeded, relatively mild ones would have sufficed. Nothing happened. That is

- why the vital changes we are facing now are so much greater.
- 4. Early economists like Adam Smith, Thomas Malthus, and David Ricardo (who were also knowledgeable in science) realised that growth can only be a time*limited phase*. Today's mainstream economists seem to have repressed this. All living people, and several generations before us, have lived in this temporary growth phase, so it is easy to understand the mistake. Today's political economy prioritises short-term financial growth at the expense of functioning vital ecosystems - which have taken nature billions of years to build and humans just under two centuries to destroy. Growth is thus not just a time-limited phase, but an existential threat to humanity. I would like to see how long the economists who believe in "decoupling" of the economy from natural resources could do without air (three minutes), water (three days) and food (three weeks). A "service" economy can only exist on top of a material economy, not instead of. For example, the internet alone already consumes 2% of the world's energy.
- 5. The ozone hole and COVID-19 were solved through rapid global alliance and action. We should be able to do the same with today's much more serious problems. Covid would have gone away on its own no matter what we did, however, the same is not true for the much more alarming and urgent threats facing all of humanity.
- 6. You must choose: Do we want i.) Planned and controlled degrowth to what the planet can tolerate and a bright future, or ii.) Catastrophic and forced degrowth and global collapse in the middle of this century? Make up your mind the time for option i.) is rapidly running out and requires a downsizing of production and overconsumption in the richest countries to well below the Earth's ecological limits.

Article written by Prof. Johan Hansson [6], professor of theoretical physics at the Luleå University of Technology in Sweden.

Go tshwenyega kudu ga lefase ka lehumo le legolo, tšweletšo ye ntši, boiketlo bjo bo oketšegilego bj.bj.. go hlotše maemo a boso bja polanete bjo bo tšhošetšago go phuhlama, le tshepedišo ya ekonomi ya lefase ka bophara ya infleišene yeo e kgomaretšwego ka gare ga lepheko la dikoloto leo le mpefalago ka mehla. Go phološa polanete, le ekonomi, ke fela degrowth yeo e ka re phološago.

Translated into Sesotho sa Leboa/Northen Sotho by Tebatso Isaac Makwala

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