More growth or a healthy, sustainable future?

Research has established the negative effects of growth on the environment, climate and health. To remain healthy and thrive requires effective measures to reduce consumption, increase circular processes in agriculture and industry, phase out toxic/non-degradable substances, and to restore and build up natural capital. We can reverse current trends with a comprehensive Green New Deal that puts the health of people and ecosystems first.

All of us grow up believing firmly that economic growth brings the good life, jobs and higher wages. But this is only half the truth. When we look at the big picture, the whole planet, another truth emerges.

Recent research (Planetary Boundaries), as well as old (Limits to Growth 1972, Arrow 1995), shows that humanity has grown so large that it threatens the planet's climate and life-support system, thus threatening our health and well-being. In short, mankind takes up too much space and uses too many resources. Climate change is just one of the problems. For an overview, see The Great Acceleration (graphic below), Anthropocene, Scientists' Warning, WWF Living Planet 2018, the stunning photos at Overdevelopment, Overpopulation, Overshoot and the article Clean energy won't save us.

Further, the benefits of growth today go largely to the rich, who hardly need more, while the middle class gets little and the bottom half of humanity remains hungry, unhealthy, uneducated and poor (Picketty).

Instead of peaceful well-being, today we all suffer from increasing climate change, resource conflicts, migration, stress, pollution and threats to our health brought on by growth. The science is clear: it is time to alter course and move in a direction that gives us a brighter future. Let's take a look at how.

New long term goals: human well-being and the biosphere's survival

The science is clear: instead of growth, it is high time to focus on our primary goal: **healthy people and a healthy biosphere** (Guardian, Come On!, Doughnut Economics, Jackson). A huge body of research points the way. Here are a few examples in different sectors:

Energy: ClimateActionRoadmap, Anderson, SDSN DDP, Figueres, Hansen, IEA 2018, McKinsey, Pollin and many others outline the path to a fossil free, low energy, electrified economy that meets the 2015 Paris climate goal. This requires reducing emissions appr. 10% per year beginning now (Anderson, Rockstrom, Mission2020). Key measures are a **tax on carbon**, natural resource taxes och ending fossil fuel subsidies (Guardian). Energy costs may double, requiring compensating the poor.

However, clean energy won't save us by itself. We must reinvent our whole economy and lifestyle.

Medical research shows how climate change, poverty and pollution are the enemies of health (UNEP Healthy Environment, Healthy People, Lancet: Health and climate,Obesity, Perera: EHP 2016, Lanphear: Little Things Matter, EHN). Solutions lie in healthy ecosystems, poverty-free societies and a stable climate.

Three important factors affect our impact on the biosphere: **population**, **consumption** and **technology** (see the IPAT equation). Technology here accounts for both resource-efficiency and pollution.

Reducing our consumption stabilizes the climate and reduces pollution. For example, air travel is a major part of annual emissions for many (Fact sheet: Air Travel). Subsidies, taxes and our friends/colleagues influence our lifestyles (UNEP: Fostering and Communicating Sustainable Lifestyles). Most of us still live far beyond a sustainable level (1 ton CO2 per person per year) and can easily reduce our footprint without suffering (Less meat, more biodiversity, Worried about the planet? Avoid that extra kid). Which countries are good models of a sustainable economy? See Costa Rica, A Good Life for All Within Planetary Boundaries, HappyPlanetIndex, Global Footprint Network and O'Neill 2015.

Employment: Historically politicians have stimulated consumption to create jobs, but this growth harms the biosphere. An alternative is a reduced workweek that keeps employment high without producing more (Victor: Managing Without Growth, UNEP IRP 2016 s 27). A basic income is another solution (Bloomberg, Wikipedia). More time gives us a more comfortable life, less stress and better health. Reduced consumption gives us less pollution, healthier ecosystems and a stable climate.

Circular economy saves resources and pollution by improving resource-efficiency (see von Weizsäcker: Factor Five). This is essential but no help if gains are eaten up by growth in population and consumption, as they have been historically. Example: auto fuel consumption is lower, but more people drive.

Sustainable agriculture preserves fertile soil, saves importing resources, increases resilience and produces less waste (Beras project, Farming for the Future). Decentralization facilitates nutrient recycling and self-sufficient communities (Günther: Ruralisation). The UN FAO Save and Grow strategy keeps small farmers productive on the land with good food security rather than unemployed and hungry in the cities. See also IPES: FOOD, agroecology, regenerative agriculture and permaculture.

Biodiversity: In order to preserve biosphere function (eg pollination), we need insect-friendly farming and to reduce human land use. Biologist E O Wilson (Half Earth) says we should allocate half of nature to reserves.

Local self-sufficiency saves transport and provides food, water, energy, job and infrastructure security to insure health and survival during catastrophes and for long term climate change. See Stockholm Resilience Center, 100 Resilient Cities, C40 Cities, Community-Wealth.org. Being prepared pays multiple benefits (US Cities SDG Index, Dawson: Extreme Cities).

Greater equality means people worry less, stress less and are healthier (The Spirit Level, Pickett-Wilkinson). Redistribution requires no extra resources. The modern welfare state has here succeeded well (Guardian)!

Growing populations create land, water, food, resource and infrastructure stress in virtually all the world's cities (Overstretched Cities, Crist). In the long run, smaller populations can prevent catastrophe and reduce persistent conflicts, crowding and disease (see Ohlsson: Livelihood Conflicts, Brown: Full Planet, Empty Plates). Family planning and education for women are well-known measures to reduce population pressure (Bongaarts: Nature 2016, Agonito: The Last Taboo, Engelman: Solutions 2011).

Fair trade/international equity: The rich nations and their corporations have used trade advantage to create wealth (Hornborg: Global Magic) and consume at an unsustainable level. Poorer nations are determined to catch up and fulfill UN SDG goals, which the UNEP IRP calculates requires 3 times current world resource usage. Planetary ecosystems are already overtaxed, so we the well-off need to reduce our consumption and instead help finance development abroad (Rees 2017, Rees 2014, Contract and converge).

Markets need regulation to protect our health and safety and preserve ecosystems (TEEB, IPES). Today, global corporations overuse the commons and lobby against public health (Korten, PFAS, EHN).

Summary: Focusing on healthy people and ecosystems rather than GDP growth gives us the basis for a lasting, secure future (Raworth). Each step along the way improves our prospects for a good life.

See also **Health:** WHO, Lancet, EHN **Economy:** Doughnut Economics (Raworth), Come On! (Wijkman), Managing Without Growth (Victor), Age of Sustainable Development (Sachs), Enough Is Enough (Dietz, O'Neil)), Prosperity without Growth (Jackson), Beyond Growth (Daly), Small Is Beautiful (Schumacher), CASSE, degrowth.org **System:** Ecosystem diagram, IPES, Club of Rome, Earth Policy Inst., Potsdam Inst. **Population:** Overpopulation (Wikipedia), Ten Billion (Emmott) **Solutions:** Drawdown (Hawken), ClimateActionRoadmap, Half Earth (Wilson), High seas reserve (Sumaila), SDSN, World Resources Institute, Plan B 4.0 (Brown), Green Gold (film, Liu), Ecology Begins at Home.