System Sustainability Diagram

Requirements for a long lasting, healthy society

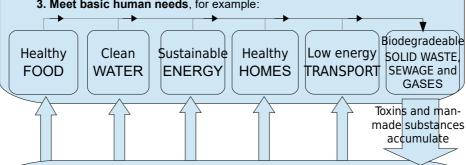


Educated, employed, responsible People ensure the health of the biosphere, ecosystems and society for their own health and future generations.

A HEALTHY, FAIR SOCIETY

Society distributes resources and pursues chosen goals. The overriding goal ought to be survival in good health for everyone. This leads to the priorities:

- 1. Preserve natural resources so there is enough for everyone in future
- 2. Adapt society to the natural resources (e.g. farmland) within its borders
- 3. Meet basic human needs, for example:



HEALTHY ECOSYSTEMS

Nature is our life-support system and the basis for all life.

Farm, forest, meadow, wetland, lake, deep sea and air: life abounds everywhere. Solar energy drives nature's self-sufficient, complex web of life that regerates itself. Ecosystems remain healthy, stable, resilient and complete when:

- 1. We harvest no more than nature produces each year (fish, fiber, forest, water...)
- 2. All production (food, energy...) is nontoxic and all waste products are biodegradeable
- 3. Humans respect nature's rich biological diversity with minimum disturbance.

Societies that last preserve their natural environment

Nature, with its interwoven ecosystems, each with its purpose and role (ecosystem service), is our lifesupport system and the foundation of all life. Nature provides us with everything we have and need, such as food, water, heat, building materials, clothes and even the air we breathe. Healthy ecosystems are the foundation for our health and well-being. But today we are steadily overdrawing our account, reducing nature's capital and threatening all of our futures, not least by dramatic climate change.

To survive, thrive and stay healthy (= social sustainability), we need to make sure that nature as a whole is healthy with each of its parts working fully (= ecological sustainability). This means restoring and preserving a stable climate, biological diversity, all remaining farmland as well as clean, unpolluted earth, air and water. How? The direction is clear: reduce the human footprint.

Definition: A sustainable society restores, preserves and builds up:

- (1) natural resources/ecosystems that sustain life (ecological sustainability)
- (2) a population size commensurate with domestic natural resources (social sustainability)
- (3) **human health** (physical, mental, social, existential) (social sustainability).
- A sustainable economy serves society and contributes to ecosystem and human health.

Read further in the factsheet Growth vs Health and Sustainability and the links below.

Health: Public Health 2.0: Planetary Health (Rockefeller Foundation), Health and climate (Lancet), Obesity (Lancet), Spirit Level (Pickett, Wilkinson), Little Things Matter: the impact of toxins on the developing brain (Lanphear.), Air Pollution's Invisible Toll (Harvard), Healthy Environment, Healthy People (UNEP), Better and better? (Lund Univ.), Environmental Health News Ecosystem health: Planetary Boundaries 2.0 (Steffen, Rockström), Overdevelopment, Overpopulation, Overshoot (Butler) Sustainable solutions: Earth Policy Institute, Drawdown, Doughnut Economics (Raworth), Half Earth (Wilson), <u>Club of Rome</u>, <u>Ensia</u>, <u>Yes Magazine</u>, <u>UN SDGs</u>, <u>Ecology Begins at Home</u>. A. Duncanson 2019-02-20