

TRN 319/425 TRANSLATING SUSTAINABILITY



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Historical Background of the Concept of Sustainability

Etymological Origin: Derived from the Latin verb sustinere (“to support,” “to maintain”).

Origin

The earliest traces of its usage can be found in 18th-century German forestry literature (Hans Carl von Carlowitz’s 1713 work *Sylvicultura Oeconomica*)

The concept of “sustainability,” or “Nachhaltigkeit” in German, can be traced back to Hans Carl von Carlowitz (1645–1714), who managed mining on behalf of the Saxon court in Freiberg. Despite the court’s forest regulations, the impact of timber shortages on Saxony’s silver mining and metallurgy industries was devastating. In his work *Sylvicultura Oeconomica oder Anweisung zur wilden Baum-Zucht* (*Sylvicultura Oeconomica* or the Instructions for Wild Tree Cultivation), Carlowitz formulated ideas for the “sustainable use” of the forest. His view that only so much wood should be cut as could be regrown through planned reforestation projects, became an important guiding principle of modern forestry.

“...how such conservation and cultivation of wood should be organized so that there may be a continuous, steady, and sustainable use.”

Key Milestones in the Development of Sustainability

1980 – World Conservation Strategy

Published by IUCN (International Union for Conservation of Nature), UNEP (United Nations Environment Programme) and WWF (World Wildlife Fund).

First time “sustainable development” was introduced in a global policy context.

Framed sustainability as balancing conservation with human needs.

1987 – Brundtland Report (*Our Common Future*)

Prepared by the UN World Commission on Environment and Development.

Gave the most cited definition of sustainable development:

“Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs.”

Brought the concept into mainstream global politics.

1992 – Rio Earth Summit (UNCED/The United Nations Conference on Environment and Development)

Attended by over 170 countries.

Produced *Agenda 21*, a comprehensive action plan for sustainable development.

Put environmental, social, and economic issues together under **one umbrella**.

1997 – Kyoto Protocol

Legally binding international treaty under the UNFCCC (United Nations Framework Convention on Climate Change).

Required industrialized countries to reduce greenhouse gas emissions.

First major global effort linking sustainability with climate change policy.

2000 – Millennium Development Goals (MDGs)

UN set 8 global goals.

Focused on measurable targets for development up to 2015.

Seen as a precursor to the SDGs.

The 8 Millennium Development Goals (MDGs)

- **End Extreme Poverty and Hunger**
- **Achieve Universal Primary Education**
- **Promote Gender Equality and Empower Women**
- **Reduce Child Mortality**
- **Improve Maternal Health**
- **Combat HIV/AIDS, Malaria and Other Diseases**
- **Ensure Environmental Sustainability**
- **Develop a Global Partnership for Development**

2015 – UN 2030 Agenda & Sustainable Development Goals (SDGs)

Adopted by all UN Member States.

17 Goals, 169 Targets → integrating environmental protection, social inclusion, and economic growth.

Became the central framework for global sustainable development.

Today – Sustainability as a Global Paradigm

Expanded beyond environment into business, law, education, translation, and culture.

Considered essential for addressing climate change, inequality, and intergenerational justice.

Functions as a cross-cutting principle guiding international cooperation.

PARADIGM

Thomas S. Kuhn and the Concept of Paradigm

Background

Thomas Samuel Kuhn (1922 – 1996) was an American physicist, historian, and philosopher of science. He is best known for his influential book *“The Structure of Scientific Revolutions”* (1962).

Meaning of “Paradigm”

Kuhn used the term “**paradigm**” to describe the entire framework of theories, methods, and standards that define legitimate research in a scientific community.

A paradigm shapes how scientists see the world, what questions they ask, and what counts as valid knowledge.

Normal Science and Paradigm Shifts

Normal science: When researchers work within an accepted paradigm, solving problems (“puzzles”) that fit its rules.

Anomalies: When persistent problems appear that the current paradigm cannot explain.

Paradigm shift: A scientific revolution that replaces one dominant framework with another (e.g., from Newtonian physics to Einstein’s relativity).

Why It Matters

Kuhn showed that science does not progress linearly but through **revolutions in thought**.

Paradigms are not only scientific; they can also guide social, cultural, and educational thinking.

Connection to Sustainability

Today, *sustainability* is often described as a **new global paradigm**—a shift in how humanity understands progress, growth, and responsibility.

Just as Kuhn’s paradigms reshape scientific understanding, the sustainability paradigm reshapes our collective worldview and decision-making.

SUSTAINABLE DEVELOPMENT GOALS



Connection Between SDG 1 (No Poverty) & SDG 2 (Zero Hunger)

Interdependence of Poverty and Hunger

Poverty and hunger are **mutually reinforcing**.

People living in poverty often **lack access to nutritious food**, clean water, and basic services — this leads to poor health and low productivity.

In turn, hunger and malnutrition **limit a person's ability to work, learn, and earn income**, keeping them trapped in the cycle of poverty.

Structural Causes

Both are driven by similar **systemic issues**:

- Inequality in land ownership and resources
- Lack of education and employment opportunities
- Economic instability, conflict, and climate change

Addressing these shared roots requires **integrated policies** rather than isolated solutions.

Sustainable Agriculture as a Bridge

Investing in **sustainable and inclusive agriculture** is one of the most effective ways to reduce both poverty and hunger.

Over 60% of the world's poor depend on agriculture for their livelihoods.

Supporting smallholder farmers, ensuring fair prices, and improving market access create both food security and income generation.

- ✓ Poverty and hunger are **interlinked** — you can't solve one without the other.
- ✓ Both depend on **systemic change**: fair economies, climate-resilient agriculture, and equitable access to resources.
- ✓ They form the **foundation** for achieving all other Sustainable Development Goals.