# Adapt to Survive: Business transformation in a time of uncertainty





# Glossary

# Adaptation

Adjustment in natural or human systems to a new or changing environment, including anticipatory and reactive adaptation, private and public adaptation and autonomous and planned adaptation. In human systems, the process of adjustment to actual or expected climate and its effects in order to moderate harm or exploit beneficial opportunities. In natural systems, the process of adjustment to actual climate and its effects; human intervention may facilitate adjustment to expected climate.

# **Antimicrobial resistance**

The ability of a microorganism (like bacteria, viruses, and some parasites) to stop an antimicrobial (such as antibiotics, antivirals and antimalarials) from working against it. As a result, standard treatments become ineffective, infections persist and may spread to others.

#### **Billion**

109 (1 000 000 000)

#### **Circular economy**

A circular economy is a systems approach to industrial processes and economic activity that enables resources used to maintain their highest value for as long as possible. Key considerations in implementing a circular economy are reducing and rethinking resource use, and the pursuit of longevity, renewability, reusability, reparability, replaceability, upgradability for resources and products that are used.

#### **Climate change**

The UN Framework Convention on Climate Change defines climate change as "a change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods."

# Conservation

The protection, care, management and maintenance of ecosystems, habitats, wildlife species and populations, within or outside of their natural environments, in order to safeguard the natural conditions for their long-term permanence.

#### Decarbonization

Removing carbon deposits or moving away from carbon based activities

#### **Deforestation**

Conversion of forested land to non-forest areas.

#### Desertification

Land degradation in arid, semi-arid and dry sub-humid areas resulting from various factors, including climatic variations and human activities. It involves crossing thresholds beyond which the underpinning ecosystem cannot restore itself and requires ever-greater external resources for recovery. Or, when individual land degradation processes, acting locally, combine to affect large areas of drylands.

#### Driver

The overarching socio-economic forces that exert pressures on the state of the environment.

#### **Ecosystem**

A dynamic complex of plant, animal and micro-organism communities and their non-living environment, interacting as a functional unit. Ecosystems may be small and simple, like an isolated pond, or large and complex, like a specific tropical rainforest or a coral reef in tropical seas.

# Electrification

The action or process of powering something with electricity.

# **Environmental degradation**

The deterioration in environmental quality from ambient concentrations of pollutants and other activities and processes, such as improper land use and natural disasters.

# **Exposure**

The presence of people, livelihoods, species or ecosystems, environmental functions, services, and resources, infrastructure, or economic, social, or cultural assets in places and settings that could be adversely affected.

# **Food security**

Physical and economic access to food that meets people's dietary needs as well as their food preferences.

# Food system

Food systems are usually conceived as a set of activities ranging from production to consumption. It is a broad concept encompassing food security and its components – availability, access and utilization – and including the social and environmental outcomes of these activities. Food systems in developing countries have been largely transformed by globalization. This change offers tremendous opportunities for food workers to access new and better employment. Yet, small scale food producers and other food workers are still too often excluded from the benefits generated by food businesses.

# Forest

Land spanning more than 0.5 hectares with trees higher than 5 metres and a canopy cover of more than 10 per cent, or trees able to reach these thresholds in situ. It does not include land that is predominantly under agricultural or urban use.

# **Fossil fuel**

Coal, natural gas and petroleum products (such as oil) formed from the decayed bodies of animals and plants that died millions of years ago.

#### **Green economy**

There is no internationally agreed definition of green economy, and at least eight separate definitions were identified in recent publications. For example, UNEP has defined the green economy as "one that results in improved human well-being and social equity, while significantly reducing environmental risks and ecological scarcities. It is low carbon, resource efficient and socially inclusive" (UNEP, 2011). This definition has been cited in a number of more recent reports, including by the UNEMG and the OECD. Another definition for green economy offered by the Green Economy Coalition (a group of NGOs, trade union groups and others doing grassroots work on a green economy) succinctly defines green economy as "a resilient economy that provides a better quality of life for all within the ecological limits of the planet."

# **Habitat fragmentation**

Alteration of habitat resulting in spatial separation of habitat units from a previous state of greater continuity. A general term describing the set of processes by which habitat loss results in the division of continuous habitats into a greater number of smaller patches of lesser total and isolated from each other by a matrix of dissimilar habitats. Habitat fragmentation may occur through natural processes (e.g., forest and grassland fires, flooding) and through human activities (e.g. forestry, agriculture, urbanization). Habitat loss and fragmentation have long been considered the primary cause for biodiversity loss and ecosystem degradation worldwide. It often refers to the reduction of continuous tracts of habitat to smaller, spatially distinct remnant patches. Although some habitats are naturally patchy in terms of abiotic and biotic conditions, human actions have profoundly fragmented landscapes across the word, altering the quality and connectivity of habitats.

# Human health

Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity.

#### **Invasive species**

Introduced species that have spread beyond their area of introduction (and, rarely, native species that have recently expanded their populations), and which are frequently associated with negative impacts on the environment, human economy or human health.

# Land degradation

A long-term loss of ecosystem function and services, caused by disturbances from which the system cannot recover unaided

#### Land use

The functional dimension of land for different human purposes or economic activities. Examples of land use categories include agriculture, industrial use, transport and protected areas.

# Lock-in

Lock-in occurs when a market is stuck with a standard, even though participants would be better off with an alternative.

# **Natural capital**

Natural assets in their role of providing natural resource inputs and environmental services for economic production. Natural capital includes land, minerals and fossil fuels, solar energy, water, living organisms and the services provided by the interactions of all these elements in ecological systems.

# **Natural environment**

All living and non-living things that occur naturally on a particular region where human impact is kept under a certain limited level.

#### **Natural resources**

Materials or substances such as minerals, forests, water, and fertile land that occur in nature and can be used for economic gain.

#### Nature postive economy

An economy that is regenerative, collaborative and where growth is only valued where it contributes to social progress and environmental protection.

#### **Organizations**

Bodies of individuals with a specified common objective. Organizations could be political organizations, political parties, governments and ministries, economic organizations, federations of industry, social organizations (non-governmental organizations (NGOs) and self-help groups) or religious organizations (church and religious trusts). The term organizations should be distinguished from institutions.

#### **Overexploitation**

The excessive extraction of raw materials without considering the long- term ecological impacts of such use.

#### **Overshoot**

The situation that occurs when humanity's demand on the biosphere exceeds supply or regenerative capacity. At the global level, ecological deficit and overshoot are the same, since there is no net import of resources to the planet.

#### **Pandemic**

The worldwide spread of a new disease. An influenza pandemic occurs when a new influenza virus emerges and spreads around the world, and most people do not have immunity.

#### Pathogen

A bacterium, virus or other microorganism that can cause disease.

# **Planetary boundaries**

A framework designed to define a safe operating space for humanity for the international community, including governments at all levels, international organizations, civil society, the scientific community and the private sector, as a precondition for sustainable development.

# **Planetary health**

The achievement of the highest attainable standard of health, well-being and equity worldwide through judicious attention to the human systems—political, economic, and social—that shape the future of humanity and the Earth's natural systems that define the safe environmental limits within which humanity can flourish. Put simply, planetary health is the health of human civilization and the state of the natural systems on which it depends. In 2014 the Rockefeller Foundation and The Lancet jointly formed the Commission on Planetary Health to review the scientific basis for linking human health to the underlying integrity of Earth's natural system.

# Policy

Any form of intervention or societal response by governmental bodies. This includes not only statements of intent, but also other forms of intervention, such as the use of economic instruments, market creation, subsidies, institutional reform, legal reform, decentralization and institutional development. Policy can be seen as a tool for the exercise of governance. When such an intervention is enforced by the state, it is called public policy.

#### **Pollution**

The presence of minerals, chemicals or physical properties at levels that exceed the values deemed to define a boundary between good or acceptable and poor or unacceptable quality, which is a function of the specific pollutant.

#### **Poverty**

The state of one who lacks a defined amount of material possessions or money. Absolute poverty refers to a state of lacking basic human needs, which commonly include clean and fresh water, nutrition, health care, education, clothing and shelter.

# **Private sector**

The private sector is part of a country's economy which consists of industries and commercial companies that are not owned or controlled by the government.

#### Scale

The spatial, temporal (quantitative or analytical) dimension used to measure and study any phenomena. Specific points on a scale can thus be considered levels (such as local, regional, national and international).

#### Sharing economy

The peer-to-peer-based activity of obtaining, giving or sharing the access to goods and services, coordinated through community-based online services

#### Source

Any process, activity or mechanism that releases a greenhouse gas, an aerosol or a precursor of a greenhouse gas or aerosol into the atmosphere.

#### Stewardship

The job of supervising or taking care of something, such as an organization or property.

#### **Sustainability**

A characteristic or state whereby the needs of the present population can be met without compromising the ability of future generations or populations in other locations to meet their needs.

#### Sustainable development

Development that meets the needs of the present generation without compromising the ability of future generations to meet their own needs.

#### **System**

A system is a collection of component parts that interact with one another within some boundary.

# Technology

Physical artefacts or the bodies of knowledge of which they are an expression. Examples are water extraction structures, such as tube wells, renewable energy technologies and traditional knowledge. Technology and institutions are related. Any technology has a set of practices, rules and regulations surrounding its use, access, distribution and management.

# **Tipping point**

The critical point in an evolving situation that leads to a new and sometimes irreversible development.

# Transformation

State of being transformed. In the context of GEO-5, transformation refers to a series of actions that explores opportunities to stop doing the things that pull the Earth System in the wrong direction and at the same time provide resources, capacity and an enabling environment for all that is consistent with the sustainable-world vision.

# **Transformational change**

The process whereby positive development results are achieved and sustained over time by institutionalizing policies, programmes and projects within national strategies. It should be noted that this embodies the concept of institutionally sustained results – consistency of achievement over time. Distinct from short-term, transitory impact.

#### **Transitions**

Non-linear, systematic and fundamental changes of the composition and functioning of a societal system with changes in structures, cultures and practices.

# Trillion

1012 (1 000 000 000 000).

# Uncertainty

A cognitive state of incomplete knowledge that can result from a lack of information or from disagreement about what is known or even knowable. It may have many types of sources, from imprecision in the data to ambiguously defined concepts or terminology, or uncertain projections of human behaviour. Uncertainty can therefore be represented by quantitative measures (e.g. a probability density function) or by qualitative statements (e.g. reflecting the judgment of a team of experts).

#### Wastewater treatment

Any of the mechanical, biological or chemical processes used to modify the quality of wastewater in order to reduce pollution levels.

#### Wasting

Wasting is the impaired growth and development that children experience from poor nutrition, repeated infection, and inadequate psychosocial stimulation. Children are defined as wasted if their weight-for-height is more than two standard deviations below the WHO Child Growth Standards median.

#### Wildlife

Wild animals collectively; the native fauna (and sometimes flora) of a region.