

# What is sustainability anyway?

## Introduction

Sustainable living, sustainable economy, sustainable agriculture, sustainable development. These are just a few phrases where the word sustainable is commonly found today. But what does it actually mean? Does the word sustainable still have the same meaning or has its use changed today?

In the following pages I would like to discuss the origin of the word sustainable. In what context it originated and became widely used. In particular, I would focus on sustainability in human development. Is it possible for societies to develop while behaving sustainably? Another question is whether sustainability can be evaluated. Globally, sustainability assessment mainly refers to environmental impact assessment. Authors such as M.H. Benson, on the other hand, argue that the whole concept of sustainability has failed and it is high time to abandon it as an environmental goal that has so far not even been possible to fully define.

Etymologically, the term sustainability comes from the Latin *sustinere*, which is a combination of the words *sub* and *tenere* and means to support, to cease. From Latin, the word was translated into Old French, and from French into English. According to the Oxford English Dictionary, the adjective sustainable became established around 1965 in the phrase "sustainable growth" (J. L. Caradonna, p.7). The online encyclopedia Britannica defines sustainability as a set of social institutions or social practices. The aim is a kind of intergenerational ethic whereby the behaviour, that is, both the economic and environmental actions of those living now, in no way diminish the chances of future generations to live in the same prosperity, wealth and utility as we do.<sup>1</sup> The idea that society and the economy are inseparable from the environment has dominated the use of the word sustainability in recent years.

## History of sustainability

The idea of economic and social sustainability as well as environmental sustainability emerged, according to J. L. Caradonna, in the late 1970s and 1980s. The term came into common usage, especially in political circles, in the 1990s. Not only the public but also politicians were sceptical about the term. Sustainability was seen as a supporting term to explain ongoing processes, especially economic growth. The word was becoming fashionable and groups across society were learning the basic principles. Their desire was to create a

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<sup>1</sup> Meadowcroft, J. (2021, November 1). *sustainability*. *Encyclopedia Britannica*. <https://www.britannica.com/science/sustainability>

society that was safe, stable, prosperous, and ecologically minded at the same time. (J. L. Caradonna, p. 2.)

What was originally a marginal concept has over time become a concept that has been central to international agreements, a priority for governments and NGOs. In my view, the term is overused without much grounding in theory.

If we were to look back in history, the first real precursor to the current concept of sustainability, according to Carabonna, appears in the Enlightenment in late 17th and early 18th century Europe. In particular, sustainability began to be discussed in Germany, France and England. At that time, it was a problem of over-cutting forests. Forests were extremely important to pre-industrial societies, and globally, because wood was a major source of energy. As farming and forestry grew, people who feared that the careless plundering of natural resources could threaten the economy began to emerge, and so they focused on investigating the possible consequences of this huge loss of forests. (J. L. Carabonna, 2014)

They were of the opinion that the loss of forests would not necessarily lead to the collapse of society, but certainly to the demise of industry and the society they knew at the time. They therefore began to promote a concept that was later called sustainable forestry. The term sustainability (Nachhaltigkeit in German) was first coined by Hans-Carl von Carlowitz in 1713, who spoke of the need to ensure a continuous supply of timber so that the forges and mines in Saxony could continue to operate.

Between 1700 and 1850, about 25 million hectares of forest were lost in Europe. The decline in logging occurred in the mid-19th century, due to the ease of extracting coal. The problem of forest loss was solved, but coal mining and the Industrial Revolution, as we know, brought with them new problems.

In the context of forestry sustainability, an example from the recent past comes to mind, when not only the Czech Republic but most of Europe was hit by a "bark beetle" calamity. Although several fundamental causes played a role here. One of the most important was the prevalence of single-strip spruce forests, which were not very resistant to the beetle. Why, then, has a forest planting approach not at all consistent with sustainability been practised over the last 100 years? After all, based on the text above, we can see that sustainability in forestry is a much older concept.

The conservative preacher and early demographer Thomas Malthus was one of the first to talk about sustainability in the 18th century, concerned that humans would soon exceed the limits of natural resources. His warnings about the potential devastation brought about by overpopulation were particularly influential in the sustainability field at the time. It was a topical issue, since, for example, between 1650 and 1850, the size of the population doubled from around 500 million to 1 billion thanks to overall progress. I find this number of people on the planet almost laughable compared with the current figure of 10 billion. On further reflection, I cannot think of anyone today who is negative about overpopulation. Rather, I

feel that there are voices being heard about the ageing population and the need to maintain it by increasing the birth rate. Is this a sustainable approach?

Interest in sustainability was reinforced by the energy crises of the 1970s, which demonstrated the extent to which civilisation is dependent on non-renewable energy sources. Discussions on this issue led to the first official definition of sustainable development as we know it today. It was set out in 1987 in a UN report entitled 'Our Common Future'. (J. L. Carabonna, 2014)

In the context of the energy crisis in the 1970s, the current energy crisis comes to mind. It is interesting how events repeat themselves cyclically. But what are the solutions to this crisis currently being discussed? In my view, society is divided into two camps. One wants to go along with sustainability and supports alternative, let us say green, ways of generating electricity. The other, on the other hand, claims that sustainable development is the cause of this crisis. I think that the acceptance of the concept of sustainability by mainstream society will be a major challenge in the future.

### **Human development and sustainability**

Now I would like to focus more on the development itself. Development is defined as "an evolutionary process in which human capacity increases in the sense of initiating new structures, coping with problems, adapting to constant change, and striving purposefully and creatively to achieve new goals. (S.R. Casadevall, 2019) According to Amartya Sen, human development can be understood as a process of expanding people's capabilities. These possibilities can be unlimited and change over time.

Development can also be understood as the social state of a nation where the needs of the people are met through the rational and sustainable use of natural resources. Other definitions speak of a multidimensional process that involves major changes in social structures, attitudes and institutions, as well as economic growth, the reduction of inequality and the eradication of absolute poverty. When the term 'sustainable development' is further specified, it is usually as 'sustainable economic development' rather than 'sustainable human development'. However, if we understand this correctly, there is no real difference between economic development and human development. Empowering people to meet their needs, wants and desires is the basis of true economic development. Human development and sustainable development share the basic view that development is about enabling people to develop. People do not derive benefits only from income, but opportunities to develop play a role in such items as health, education, autonomy and freedom. All these items contribute to human development. (Neumayer, 2012)

In 1987, the concept of sustainable development was defined, which is based on three pillars. Thus, three components of development can be distinguished: economic, social and environmental. The principle of sustainable development in the territory is most often

applied in the environmental pillar in arguments concerning the management of natural resources.

For the sustainability of the development of the physical environment, material and energy flows must satisfy that the rate of use of renewable resources does not exceed the rate of their regeneration. Furthermore, the rate of use of non-renewable resources must be slow enough not to exceed the rate at which sustainable renewable substitutes are developed. Finally, the intensity of pollution shall not exceed the assimilative capacity of the environment.

Although there are rankings, such as the Environmental Performance Index, that rate countries in terms of their overall environmental performance. I personally rate pollution intensity against assimilative capacity much more critically. I think our rate of economic development and the associated greater and greater pollution has long since exceeded the assimilation threshold. Going forward, the transition to a very low carbon economy will be one of the biggest challenges we face.

The social sustainability pillar talks about social sustainability, which must be a combination of population, capital and technology. This combination must be configured in society so that the standard of living of each individual is adequate and secure. The social dimension of sustainability can be expressed as social cohesion. In order to compare social cohesion, the United Nations Development Programme (UNDP) tracks a so-called Human Development Index for all UN Member States. People in low-development countries suffer from low income levels, poor education, poor health and low life expectancy, but these low levels of human development may not even be sustainable in the future. For the vast majority of people living in these countries, life is indeed 'short, nasty and brutal' (Neumayer, 2012)

The last pillar is the economic development pillar. The economic side of sustainability is closely linked to the social side. Mainstream economic science, and especially economic practice, has so far been primarily concerned with the question of economic growth and with finding ways to achieve this growth in a sustainable way. It is therefore in the field of economics that development is most often more or less automatically identified with growth. In this context, economic growth can be considered to be positive in terms of sustainability if it is achieved through intensification, technological or organisational innovation and higher quality and productivity of human labour - not through further exploitation of natural resources. The development and production of environmentally friendly, less energy- and resource-intensive technologies and the elimination of past environmental pollution are making an increasing contribution to the economy of developed countries in particular. Most commonly used economic indicators correspond to the growth orientation of mainstream economic science and do not consider the costs, losses and degradation of natural resources. For example, the most commonly used and reported macroeconomic indicator of gross national or regional product, used to quantify economic prosperity, includes without distinction activities that contribute to well-being and activities

whose consequences clearly degrade the quality of life and the environment (e.g. arms production, environmentally damaging agricultural practices, devastation of land by strip mining). In addition, some demonstrably economically and socially productive and positive activities are not counted in the gross national or regional product - for example, self-help in the community.

### **The end of the sustainability concept**

I would like to conclude my essay by discussing the concept of sustainability in terms of unfulfilled potential. M.H. Benson outlines this perspective in her article and I share some of her views.

If we look at the documents on sustainable development. I would rate them rather negatively. A lot of them are non-binding and non-compliance with their points is not enforceable. The United Nations (UN) Rio+20 conference on sustainable development in June 2012 resulted in a 44-page non-binding 'declaration' that is widely regarded as a failure. In the Czech Republic, the so-called Green Deal is currently resonating. When all 27 member states of the Union pledged to turn Europe into the first climate-neutral continent by 2050. They have therefore pledged to reduce emissions by at least 55% by 2030 compared to 1990. You know for yourselves how this agreement is being received or, rather, rejected.

The concept of sustainability dates back to the early UN conferences in the 1970s and is increasingly difficult to separate from sustainable development, although the two concepts are not necessarily the same. In general, "sustainability" refers to the long-term ability to continue an activity, process or use of natural resources. In contrast, 'sustainable development' reflects the broader societal goal of how economic and social development should take place - namely with sufficient regard for the environment and natural resources to ensure the continued availability of natural capital and other environmental amenities. The international community adopted sustainable development at the 1992 UN Conference on Environment and Development in Rio de Janeiro and incorporated it into both the Rio Declaration and Agenda 21.

However, pursuing the SDGs has not led to effective climate change mitigation. We see that tropical rainforests are being cut down, palm plantations are expanding, permafrost is melting, average temperatures are rising, etc. The concept of sustainability has therefore failed to change human behaviour sufficiently. Or do we just need more time? But how much more will the planet give us?

It's not that sustainability is a bad idea. It remains valuable as an overarching principle for the broadest of global ecological ideals: leaving a living planet for future generations. The question is whether the concept of sustainability is still useful as an environmental management goal. Do we even know what is and what is no longer sustainable as the planet adapts to the constraints we place on it?

The pursuit of sustainability inherently presupposes that (a) we know what can be sustained, and (b) we have the ability to hold on to some type of stationarity and/or equilibrium. (M.H. Benson, 2013) But what if change is so rapid that it cannot be predicted? Shouldn't we settle for something more adaptive?

In conclusion, therefore, there are many more questions than answers. I myself used to see sustainability as something that contemporary society cannot do without. Increasingly, however, I see both the vagueness of the concept and the reluctance to implement it.

Whatever the future of sustainability as a concept, I would certainly like to see our planet survive. Otherwise, there would be no point in bringing another generation into the world.

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