THE UNIVERSITY of EDINBURGH
Global Academy of
Agriculture and Food Systems

What is sustainable development?

Here we discuss how sustainable development tries to balance people planet and profit. Let's look in more detail at what sustainable development is, as well as some of the ways it is being put into action in food systems.
The full definition of Sustainable Development agreed by most organisations and governments is:
"Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs."

- Our Common Future(The Brundtland Report)

At its heart, sustainable development seeks to balance meeting essential needs, particularly of the vulnerable and poor, while recognising that there are limits to the natural systems that humans utilise for many resources.

It is a contested topic – there is no agreement on what it is and how it should be applied. Some see it as a way to approach equality between human populations who have high standards of living with access to food, health care, and the ability to consume high levels of resources, and those populations who do not have access to basic resources such as food, fuel, safe water and sanitation, healthcare and education. Others see the protection of the planet's natural environment as the key aspect of sustainability; if that is achieved, all other aspects will inevitably follow.

To start to understand the complexity of sustainable development we will consider some of the agreed underlying principles: at the Rio Earth summit in 1992, global leaders agreed to 27 principles which give detail to the concept of sustainable development. You can explore all 27 principles.

These are some of the principles that have been key in developing approaches to sustainability and the Sustainable Development Goals (SDGs) (we will look at the SDGs in more detail later in the course). These founding principles may at first seem like simple approaches to achieving a balance between economic growth, equality for all, and protecting the environment - but each one is a complicated ethical position with many difficulties when you try to apply them.

Key Principles

Inter- and intragenerational equity
Current generations should not prevent future generations from meeting their needs. At the same time, we must address the current inequality between people who have access to a lot of resources and enjoy a high quality of life, and those who live in poverty and have limited access to resources.

The precautionary principle
Some of the big global challenges we are facing are complex and require a great deal of scientific data collected over many years, decades or even centuries to fully understand – climate change, for example. The precautionary principle accepts that sometimes it is better to take action to address or avoid a problem even in the absence of definitive scientific proof of causality, especially if that action can prevent harm. There is a lot of controversy over the application of this principle, as it calls into question how we use scientific evidence to make decisions.

The voluntary principle
We have already seen that using sustainable certification can help to shift behaviour in certain business sectors, and there are a large number of certification schemes used in food systems. These sustainability standards are an example of how industry can voluntarily take action to reduce environmental and social negative impacts without governments forcing them to through legislation. This can be helpful as, often, voluntary action can be enacted quicker than changing or creating new laws.

The polluter pays principle

This principle is straightforward. Those responsible for polluting the environment must pay to clean up the pollution or, more desirably, should change their activities to avoid pollution in the first place. This is about avoiding external costs – so, a manufacturer who releases a toxic substance into a water body must pay for the clean-up, and should invest in the manufacturing plant and safety measures to avoid releasing toxic substances. The end user of the product will then absorb these costs. Often, we see that governments and the wider society pay the price for pollution.

Assisting poorer communities and countries

The principles also recognise that countries with developing economies are particularly vulnerable and should therefore have special focus to help their populations have access to the quality of life, education, healthcare and secure food systems enjoyed by more developed economies.

Environmental limits

Much of the action around sustainability and the environment is based on the principle that there are limits to the amount of resources we can extract from the 'natural' environment, as well as limits to the capacity for ecosystems to absorb our waste or pollution. The aim of sustainable development is to allow ecosystems to function without being degraded by our economic activities.