It is impossible to know precisely what the consequences of unchecked or badly managed development will be, but we have enough information to understand that they are potentially negative, costly and irreversible. Sustainable development gives us a new way of thinking through and managing human impact on the world – one that can generate long-lasting positive results for the greater benefit of human societies.
What is Sustainable Development?
By way of introduction...

Monique Huteau, a recently retired nurse, is up to her elbows in soil as she tends to her lush garden. Strawberries, lettuce, squash, potatoes and more, she grows enough to cover a large portion of her family’s needs in produce, buying what she lacks at the local hypermart. She also cooks, cleans, cares for her grandchildren and paints watercolours at her home in the countryside a few minutes outside Poitiers, France.

During their working years, she and most of her nine siblings earned considerably more than their parents had, poor farmers from the Anjou region. They live in well-maintained houses, drive nice cars, and take yearly vacations to distant places. A lot of hard work and astute savings and investments have allowed Monique and her husband, a retired teacher, to achieve these things – with the help of French social benefits which have kept their health care and education costs low and ensured them an adequate retirement income. For Monique there is no question: her generation had opportunities not available to their parents and consequently live very different lives materially and socially.

Monique’s experience is a common one in OECD countries: generations that had endured scarcity and hardship growing up have achieved, even on relatively modest incomes, the satisfaction of basic needs plus enough discretionary income to indulge in a few luxuries. With this have also come certain social benefits. Education levels have increased. More people have access to health care. Leisure time is guaranteed through paid vacations and retirement plans. There is more geographic and social mobility.

Indeed, the so-called developed world has seen average improvements in many areas that are important to “the good life”. Along with these improvements, however, have come worrying indications that this growth has costs which we cannot continue to ignore.

All the economic prosperity in the world cannot alone solve a problem like climate change on its own. On the contrary, unchecked growth – in the number of people driving cars and taking planes, for example – is making the situation worse. Also, average economic growth says nothing about income inequality: if wealth is growing for only a few, then the majority may not experience any tangible gains or improvements.
These problems are compounded when added to the challenges facing the developing world – encompassing countries such as China and India who are undergoing rapid growth, as well as those like many Sub-Saharan African countries which are still far from having what the richer countries take for granted: peace, basic health care access, education, a relatively safe water supply, and so on.

Finally, do the resources exist to enable this kind of lifestyle for all of Earth’s 6.5 billion residents? It is estimated that in 2002 humans extracted over 50 billion tons of natural resources from the planet’s ecosystems, up a third in just 20 years. Projected economic growth rates put our extraction needs at 80 billion tons in 2020. Would using the Earth’s resources at this rate be advisable? Can we and should we continue with the traditional model of development?

These problems are not new. Indeed, the accumulation of a number of bad habits and “unsustainable” practices seems to have led to critical stresses on societies and the environment. In spite of unprecedented economic growth, the world has been on a course leading to resource depletion and serious social crises, and old ways of problem-solving have proven inadequate. Something has to be done to change development – its philosophy and methods – if societies wanted to reverse those negative trends. As Albert Einstein wrote, “Today’s problems cannot be solved if we still think the way we thought when we created them.”

We hear the term “sustainable development” in high-level discussions; we see it in political platforms and on corporate websites. More and more universities have programmes covering the field. Indeed, sustainable development has become a kind of conceptual touchstone, one of the defining ideas of contemporary society. This chapter reviews the debate on what exactly the concept of sustainable development means. It looks at where the term came from and what it now includes. And it asks how we can make use of the concept in our daily lives and our systems of governance.
2. What is Sustainable Development?

Defining sustainable development

**Development:** the act or process of developing; growth; progress.

**Sustainable development:** development that meets the needs of the present without compromising the ability of future generations to meet their own needs.

The term sustainable development began to gain wide acceptance in the late 1980s, after its appearance in *Our Common Future*, also known as *The Brundtland Report*. The result of a UN-convened commission created to propose “a global agenda for change” in the concept and practices of development, the Brundtland report signalled the urgency of re-thinking our ways of living and governing. To “responsibly meet humanity’s goals and aspirations” would require new ways of considering old problems as well as international co-operation and co-ordination.

The World Commission on Environment and Development, as it was formally called, sought to draw the world’s attention to “the accelerating deterioration of the human environment and natural resources and the consequences of that deterioration for economic and social development.” In establishing the commission, the UN General Assembly explicitly called attention to two important ideas:

- The well-being of the environment, of economies and of people is inextricably linked.
- Sustainable development involves co-operation on a global scale.

Sustainable development is about integration: developing in a way that benefits the widest possible range of sectors, across borders and even between generations. In other words, our decisions should take into consideration potential impact on society, the environment and the economy, while keeping in mind that: our actions will have impacts elsewhere and our actions will have an impact on the future.

We tend to arrange things compartmentally, by divisions and departments, governments and communities; even households are rarely set up as holistic systems. Ministries of agriculture, ***

---

OECD Insights: Sustainable Development
the interior and foreign affairs handle the issues that come under their domain. We divide up the tasks of our daily lives: work, rest, errands and holidays. It is not that we can’t see business, government or home life as a “whole” – making a household budget or a corporate strategy are examples of just this type of exercise – but in the bustle of our complex lives it can be difficult to take the time to see beyond the most immediate or obvious concerns. Often, as the old saying goes, we can’t see the forest for the trees.

The concept of sustainable development has been used to articulate several essential shifts of perspective in how we relate to the world around us and, consequently, how we expect governments to make policies that support that world view.

“Governments face the complex challenge of finding the right balance between the competing demands on natural and social resources, without sacrificing economic progress.”

Sustainable Development: Critical Issues

First, there is the realisation that economic growth alone is not enough: the economic, social and environmental aspects of any action are interconnected. Considering only one of these at a time leads to errors in judgment and “unsustainable” outcomes. Focusing only on profit margins, for example, has historically led to social and environmental damages that cost society in the long run. By the same token, taking care of the environment and providing the services that people need depends at least in part on economic resources.

<table>
<thead>
<tr>
<th>Will I know it when I see it?</th>
</tr>
</thead>
<tbody>
<tr>
<td>In the first years of the 21st century the term sustainable development has entered the public sphere. No longer restricted to academic and policy debates, the concept has made its way into everyday language and into community activities worldwide. When we say the words “sustainable development”, what exactly do we mean?</td>
</tr>
<tr>
<td>Sustainable development can be:</td>
</tr>
<tr>
<td>• spreading the benefits of economic growth to all citizens;</td>
</tr>
<tr>
<td>• turning brownfields into ecologically sound urban housing projects;</td>
</tr>
<tr>
<td>• increasing educational opportunities for both girls and boys;</td>
</tr>
<tr>
<td>• innovating industrial processes to be more energy-efficient and less polluting;</td>
</tr>
<tr>
<td>• including citizens and stakeholders in policy-making processes.</td>
</tr>
</tbody>
</table>

OECD Insights: Sustainable Development
Next, the interconnected, or interdependent, nature of sustainable development also calls for going beyond borders – whether they be geographical or institutional – in order to co-ordinate strategies and make good decisions. Problems are rarely easily contained within predefined jurisdictions such as one government agency or a single neighbourhood, and intelligent solutions require cooperation as part of the decision-making process.

Take genetically modified crops, for example. Making decisions on the production, consumption and development of GMOs requires the participation of agriculture, environment, trade, health and research ministries. It requires that these ministries compare evidence and agree on a position within national government so that they can enact workable policies – policies that have the greatest benefit for the least cost. But the need for co-ordination doesn’t stop at the national level. Apart from anything else, seeds from genetically modified plants can cross borders, carried by wind or birds, adding an international dimension to the issue. Differing policies between import and export countries leads to confusion and inefficiency in trade, as processed foods containing just one genetically modified ingredient require special labelling and are even banned by some countries.

Finally, thinking about human actions has had to undergo a temporal shift: put simply, we should consider the impact of a given choice beyond the short term. If poorly-managed logging leads to the depletion of a forest in the interest of immediate profit, then the overall result is actually a substantial loss: loss of income over the long term, loss of biodiversity, loss of capacity to absorb carbon dioxide, among other things.

An “honest” approach to timelines is also essential to questions of intergenerational equity: the idea that resources, whether economic, environmental or social, should be utilised and distributed fairly across generations. No single generation should bear an undue burden. This is not only a problem of leaving a clean, healthy planet for future generations, but also concerns pressing problems like meeting the medical, financial and social needs of an ageing population.
The three pillars of sustainable development

At the core of sustainable development is the need to consider “three pillars” together: society, the economy and the environment. No matter the context, the basic idea remains the same – people, habitats and economic systems are inter-related. We may be able to ignore that interdependence for a few years or decades, but history has shown that before long we are reminded of it by some type of alarm or crisis.

The fact of the matter is that we depend on ecosystems and the services they provide in order to do what we do: run businesses, build communities, feed our populations and much more. Whether we consider the more obvious, immediately vital examples – the need for soil that can grow food or for clean water to drink – or the less obvious but equally significant things like oxygen production during photosynthesis or waste processing by bacterial decomposers, we cannot avoid the conclusion that we depend on the environment for our existence. If we damage or destroy the capacity of the environment to provide these services we may face consequences for which we are completely unprepared.

“As a group, women – and their potential contributions to economic advances, social progress and environmental protection – have been marginalised.”

In the same way, the long-term stability and success of societies rely on a healthy and productive population. A society (or communities within a larger society) that faces unrest, poverty and disease will not develop in the long term: social well-being and economic well-being feed off each other, and the whole game depends on a healthy biosphere in which to exist.

Understanding the complex connections and interdependence of the three pillars requires some effort, and the effort has to be constant. Whether we’re talking about the duration of political cycles or the length of time the media focuses on a particular issue, the question of our collective attention span is an important one for sustainable development.
2. What is Sustainable Development?

The Rio Earth Summit and Agenda 21

<table>
<thead>
<tr>
<th>In June, 1992, in Rio de Janeiro, representatives from 179 countries came together for the United Nations Conference on Environment and Development, popularly known as the Rio Earth Summit. One of the major agreements signed during this meeting was a programme of action called Agenda 21. The 300-page document describes first steps towards initiating Sustainable Development across local, national and international levels as the world moved into the 21st century. Signatories promised to pursue action in four domains:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Social and Economic Dimension, such as combating poverty and promoting sustainable urban planning;</td>
</tr>
<tr>
<td>• Conservation and Management of Resources, such as safeguarding the oceans' fisheries and combating deforestation;</td>
</tr>
<tr>
<td>• Strengthening the Role of Major Groups, such as women, local governments and NGOs; and</td>
</tr>
<tr>
<td>• Means of implementation, such as transfer of environmentally-sound technology.</td>
</tr>
<tr>
<td>For example, Chapter 28, Local authorities’ initiatives in support of Agenda 21, calls for the participation of local and regional governments and civil society in the development of Local Agenda 21. Co-ordination in the sustainable development effort from the international level down to local municipalities will ensure make every action more effective. Cities across the world, from Surabaya, Indonesia to Seattle, United States – have implemented such a plan to promote sustainable development at the local level.</td>
</tr>
</tbody>
</table>

Trade-offs

With tens of millions of inhabitants concentrated in a limited space, today’s mega-cities struggle to balance the needs of the population with the capacity of the existing infrastructures. Juggling the complex web of activities in urban environments is an ideal place to start thinking through the trade-offs that sustainable development can imply. For instance, everybody might agree that traffic is a nightmare, but making changes to improve the situation inevitably affects many people in a variety of ways, not all positive. Should the city discourage car travel but risk overloading public transport? Should it introduce measures to make traffic move more quickly and risk attracting more vehicles onto the roads? Calculating the financial costs of transport policies is relatively straightforward, but predicting the personal choices and behaviours of those using the urban space is much less so. What will city dwellers and commuters actually decide to do? For example, if the bus service improves, will it attract car drivers or people who might otherwise have walked?
The lesson here is not that it’s impossible to improve things, but that improvement means thinking through the links among a number of factors. Less traffic equals shorter travel times and easier movement. Better air quality means a healthier population. The trade-offs, such as taxes or tolls, in exchange for overall improvement of the urban space are being tested in London, Singapore and other cities. The debate as to the success or failure of such schemes shows in a concrete fashion what’s at stake. The environmental impacts may seem clear, but what about social equity – the rich can afford to pay a congestion charge that poorer people can’t – or the economic impact on shops and other businesses?

On a personal level, the choices may not be so clear-cut either. Imagine you want to avoid supporting the use of pesticides so you choose to buy only organic produce. However, the only organic grocery store in your city is too far to walk or cycle to. Fossil fuels have to be burned to get you there and back. Likewise, you may want to support local producers and avoid the damage air transport causes. But lying towers to the UK from Africa for instance may cause less harm than importing towers from nearby Holland that needed heated greenhouses and intensive fertilizer use. And horticulture may benefit more people in Africa than in the Netherlands. In a perfect world, making good choices would be easier, more coherent task; in the meantime, the concept of sustainable development is helpful for balancing out the vast number of variables and optimising our decisions.

**Sustainable development: process or end result?**

So, is sustainable development a kind of guiding principle, as many of its supporters would argue? Or rather a concrete goal or set of goals that can be measured, evaluated and deemed “achieved”? Looking at the massive body of literature on the subject reveals plenty of support for both these points of view and several other possibilities. Really, though, there is no obligation to choose among these options. Whether we are talking about the abolition of slavery, universal education, democracy or any of the “sea changes” that previous generations have undergone, we are always in a constant process of translating big ideas into concrete practices. And this always involves multiple experiments, learning, failures, mistakes and a constant effort at adapting and refining our methods.
Sustainable development is also a means for considering the relationships of things to each other in order to propose viable solutions. As the Brundtland report puts it, “sustainable development is not a fixed state of harmony but rather a process of change...” It is a way of forcing ourselves to look at factors we might rather ignore in favour of short-term benefit, as in the case of a polluting industry that worries primarily about this year's profits, or a pension plan that doesn’t account for the increase in the number of retirees relative to the number of subscribers.

Brice Lalonde, former Minister of the Environment in France, offers the following definition: “To me, it refers to how the economy should enable us to live better lives while improving our environment and our societies, from now on and within a globalised world.” In this view, sustainable development frames the possibilities for progress: the economy is a vehicle that helps us reach the overall, collective, goal of improving quality of life globally. Success comes through putting all three pillars on the same progressive trajectory, or path.

It might be useful, then, to see the advent of sustainable development as a significant change in how people and governments perceive their activities, their roles and responsibilities: from primary emphasis on increasing material wealth to a more complex, interconnected model of the human development process.

Sustainable development is therefore:
> a conceptual framework: a way of changing the predominant world view to one that is more holistic and balanced;
> a process: a way of applying the principles of integration – across space and time – to all decisions; and
> an end goal: identifying and fixing the specific problems of resource depletion, health care, social exclusion, poverty, unemployment, etc.

**Easier said than done?**

Society, the environment and the economy – doesn’t that cover just about everything? One of the first things we notice when trying to understand sustainable development is the vastness of the topic. Taking into account the economic, social and environmental
Low-tech high-impact: insecticide-treated mosquito nets

Sustainable development means using all the tools at our disposal to promote well-being. As the following example shows, technologies don’t have to be high-tech to achieve significant change.

Malaria kills a child every 30 seconds and over a million people every year. Apart from children, its main victims are pregnant women. Most of those who die are in Africa. Poor people and communities with limited access to health care are the worst affected.

Malaria is responsible for a “growth penalty” of 1-3% a year in some countries and contributes to the substantial differences in GDP between countries with and without the disease. It can affect the tourist industry since travellers prefer to avoid badly affected areas. Traders’ unwillingness to travel to and invest in malaria affected areas can leave markets underdeveloped. Farmers cannot take the risk of planting labour-intensive crops because of malaria’s impact on labour during the harvest season.

In some countries, malaria may account for as much as 40% of public health expenditure. 30 to 50% of inpatient admissions and up to 60% of outpatient visits. It stops children from going to school and can cause permanent neurological damage. It hits the earnings of sick workers and can ruin families who have to pay for drugs, other health care and transport to hospital.

The parasite that causes the disease is becoming more resistant to antimalarial drugs, and new treatments are expected soon. Likewise, the mosquitoes that transmit the disease are becoming more resistant to insecticides.

A simple technology to prevent deaths and the spread of the disease exists: insecticide treated mosquito nets. The nets generate a chemical halo that extends beyond the fabric itself to repel and deter mosquitoes from biting or shorten the mosquito’s life span so it can’t transmit malaria. They also reduce the quantity of insecticide that needs to be sprayed in homes and elsewhere. But while the technology is simple, using it effectively depends on getting a number of things right.

- People need to be convinced of the utility of the nets and shown how to use them through education and social marketing campaigns.
- Taxes and tariffs on mosquito nets, netting materials and insecticides should be waived.
- Encouraging local manufacturers and suppliers can help reduce costs so that nets are affordable. 
- Nets that can last for years without having to be retreated with insecticide need to become widespread.

In Kenya, from 2003 to 2006, the number of young children sleeping under insecticide-treated nets increased tenfold thanks to a programme of free mass distribution. There were 44% fewer deaths than among children not protected by nets. Kenya’s success suggests three ingredients which all need to be present for malaria control to succeed: high political commitment from the government, strong technical assistance from the WHO and adequate funding from international donors.

To find out more, visit the website of the Roll Back Malaria Partnership launched in 1998 by the WHO, UNICEF, the United Nations Development Programme and the World Bank: www.rollbackmalaria.org.
aspects of development can ultimately include a wide variety of concepts, policies and projects. So wide, some would say, that it loses its usefulness as a concept.

This could in part explain why, in spite of its popularity and rapid acceptance by some members of government, civil society, countless companies and many cities, the concept of sustainable development has not yet translated into widespread changes in either behaviours or policy, and this after more than a decade of efforts. Early supporters of the concept had hoped for rapid progress, but the complexity of the problems at hand, their

Women and Sustainable Development

“At present, the female half of the world’s human capital is undervalued and underutilised the world over... Better use of the world’s female population could increase economic growth, reduce poverty, enhance societal well-being, and help ensure sustainable development in all countries.”

Gender and Sustainable Development: Maximising the Economic, Social and Environmental Role of Women

When it comes to improving economies, societies and preserving the environment, women have a central role. Across the globe, per capita income is lower in countries where women are significantly less educated than men, suggesting this investing in women is a first step to raising everyone’s well-being. In Africa, studies show that giving women equal access to capital could increase crop yields by up to 20%. By developing countries would benefit from fully using women’s potential too; for instance the UK’s GDP could rise by 2% by better harnessing women’s skills. Improving education for girls and women also has social benefits, including lower fertility rates, reduced infant and maternal mortality, and improved nutrition for all members of the family. Data from developing countries indicate that one to three years of maternal schooling reduces child mortality by 15% when an equivalent level of paternal schooling is achieved.

Women are also on the environmental “frontlines”. Wangari Maathai won the 2004 Nobel Peace Prize for her work with the Green Belt Project, reforesting vast areas of Kenya. The 30 million trees women have planted through the project provide firewood and shelter, and improve local climate and soil. As Maathai said in her acceptance speech, “throughout Africa, women are the primary caretakers, holding significant responsibility for tilling the land and feeding their families. As a result, they are often the first to become aware of environmental damage as resources become scarce and incapable of sustaining their families.” As Maathai proves, women often hold the solutions, too.

Clearly, improving the situation of women worldwide is a critical first step for sustainable development — indeed this was one of the conclusions of Agenda 21.
reach across cities, regions and beyond national borders, and the difficulties inherent in changing people’s perceptions and actions have all contributed to frustrating those hopes.

Adding this level of complexity to decision-making processes most probably necessitates changes in previous patterns of behaviour – whether at the level of individual consumption or international law. And change is almost never easy, even when it is obviously necessary. It is particularly difficult when it might involve real or perceived sacrifices on the part of one “pillar”, industry, country or generation in favour of another.

It is still quite common to hear that sustainable development is primarily about the environment. And while it is true that the concept grew out of thinking about the dangers of environmentally unsustainable practices such as the damage done to ozone layer by CFCs or the damage to soils and water supplies due to pesticides, sustainable development has also always included the social dimension.

In any case, to get caught up in an argument over whether sustainable development is more about the environment or about people is to miss the point: it is the connection of humans, their economies and societies to the ecosystems that support them which defines sustainable development. “Environmental problems are really social problems anyway,” said Sir Edmund Hilary, the first man to conquer Mount Everest. “They begin with people as the cause and end with people as the victims.”

So really we can see sustainable development as a big theory, a process, or as practical guidelines for making solid development decisions that do not blindly seek growth in one area only to cause damage in another. We can choose to support any or all of these positions, provided that we have the information we need to make honest assessments about our activities and their impact – and make some of the “tough” decisions that good management often requires.

Applying the principles of sustainable development is really nothing more than applying the principles of sound management to all our resources, like we would if we wanted to create a prosperous business or build a new house. Rather than overlook potential conflicts, we can plan ahead, integrating considerations of what counts from the beginning. Of course this is easier said than done:
spending money now to prevent something that “might” happen in the future is a challenge for us. Just as spending money to fix a bad situation “elsewhere” is also tough. Really, though, the future is right around the corner, and in our globalised world what seems far can become very suddenly close. By following the example of the ever-increasing number of individuals, businesses and governments who make planning decisions within a sustainable development framework, we ensure ourselves and our children a brighter future.
2. What is Sustainable Development?

---

### Find Out More

#### ... FROM OECD

**Un the internet**

For a general introduction to OECD work on sustainable development, visit: [www.oecd.org/sustainabledevelopment](http://www.oecd.org/sustainabledevelopment).

**Publications**

**Sustainable Development: Critical Issues (2001):**
Following a mandate from OECD Ministers in 1998 this report stresses the urgency to address some of the most pressing challenges for sustainable development. It reviews the conceptual foundations of sustainable development, its measurement, and the institutional reforms needed to make it operational. It then discusses how international trade and investment, as well as development co-operation, can contribute to sustainable development on a global basis, and reviews the experience of OECD countries in using market-based, regulatory and technology policies to reach sustainability goals in a cost-effective way.

**Also of interest**

Under the theme of "Energy for Sustainable Development", this brochure presents policy findings from OECD, IEA and NEA reports relating to energy, climate change and sustainable development. It focuses on four main topics:

1. widening energy access in developing countries,
2. increasing energy research and development, and dissemination,
3. promoting energy efficiency and diversity, and
4. benefiting from energy-related climate change policies.

**Gender and Sustainable Development: Maximising the Economic, Social and Environmental Role of Women (2003):**
As a group, women and their potential contributions to economic advances, social progress and environmental protection—have been marginalised. Better use of the world's female population could increase economic growth, reduce poverty, enhance societal well-being, and help ensure sustainable development in all countries. Closing the gender gap depends on enlightened government policies which take gender dimensions into account.

This report is a contribution by the OECD to the UNCSO and its cross-cutting work on gender. It aims to increase understanding of the role of women in maintaining the three pillars of economic, social and environmental of sustainable development.

**Advancing Sustainable Development, an OECD Policy Brief (2006):**
This Policy Brief looks at progress towards sustainable development in the OECD and its member countries, and at what more can be done to advance sustainable development in the Organisation’s work and policy discussions.

All titles are available at [www.oecd.org/sustainabledevelopment](http://www.oecd.org/sustainabledevelopment).

#### ... AND OTHER SOURCES

**Our Common Future ("The Brundtland Report")** ([www.un-documents.net/wced-ocf.htm](http://www.un-documents.net/wced-ocf.htm))
This 1987 report from the United Nations World Commission on Environment and Development placed environmental concerns on the political agenda and laid the foundation for the 1992 Earth Summit and the adoption of Agenda 21, the Rio Declaration and the Commission on Sustainable Development.