



Title: Economic growth and sustainable development

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Short version

All countries are monitoring their economies very carefully. In the market economy system, the economy is expected to grow steadily. Despite expectations, according to the World Bank, the slowdown in economic growth started in the 1960s.¹ Based on this information the members of the Club of Rome began to doubt whether endless economic growth is possible at all. In the early 1970s, researchers at the Massachusetts Institute of Technology, commissioned by the Club of Rome, developed a model of economic growth that looked at changes in the five determinants of economic growth (population, agricultural output, natural resources, industrial output and pollution), analysing past global developments and projecting changes up to 2100. The analysis concluded that the use of the above listed resources has increased exponentially throughout human history. The number of people, the area of arable land, the amount of minerals extracted and also the economy as a whole, cannot grow indefinitely on a finite planet Earth.² A report published in 2012 to mark the 40th anniversary of this study confirmed that the world economy has so far followed the projected growth trend in all aspects.³ These studies showed clearly that the linear economic model, used for centuries, is unsustainable, and economic growth must decouple from the use of natural resources. But what could the new economic model look like?

From the second half of the 1980s, the United Nations (UN) started to present the idea of harmonious economic, environmental, and social development or sustainable development. Sustainable development is defined as balanced development that meets the needs and aspirations of the present generation without compromising the analogical interests of future generations. This concept, presented at the 1992 Rio de Janeiro Conference on Environment and Development, drew worldwide attention and 193 countries approved it.⁴ Sustainable development has been seen as a process that decouples economic growth from the use of natural resources and aims at economic well-being and quality of life of a nation, region, local community, or individual. This process also provides an answer to the question: what could the new economic model look like?

In 2015, the 193 countries of the UN's General Assembly adopted the Agenda 2030 that consists of 17 Sustainable Development Goals (SDGs). The 2030 Agenda is a holistic plan for

¹ Oja, K. (2017)

² Meadows, D.H., Meadows, D.L., Randers, J., Behrens, W. W. III (1972)

³ Randers, J. (2012)

⁴ The World Commission on Environment and Development (1987)



action on all fronts – social, economic and environmental. The universal nature of the Sustainable Development Goals (SDGs) calls for a profound transition in the way we look at – and work for – development: from a focus mainly on the needs of poor countries, to one that emphasises well-being and sustainability in all countries. Putting the world on a sustainable and resilient development path requires bold and transformative steps underpinned by new tools, new data, and new ways of working and new resources.”⁵

The aim of this training material is to draw students' attention to the fact that a classic market economy based on the idea of continuous economic growth is unlikely to bring us closer to the goal of increasing the well-being of society. This material introduces the idea of economic growth and explains the factors that drive economic growth; it reviews a report where scientists conclude that on a finite planet Earth unlimited economic growth is impossible; it gives an overview of the concept of economic development and sustainable development; it also gives an overview of Agenda 2030 and SDGs. UN member states approved the SDGs in 2015, which means that actions to achieve these goals have already been taking place for the past 7 years. During this training, we are looking for evidence that our country is working to achieve the goals of sustainable development.

⁵ Ibid



Long version

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Introduction

Director of the research publication ‘*Our World in Data*’ Max Roser (2021) has explained in his article that with the advance of economic growth, a history of global poverty reduction has begun. In his opinion, the last two centuries have been the first in the history of mankind, when societies have achieved sustainable economic growth and the reduction of global poverty has been one of the most important achievements in history. Nevertheless, 62% of the world’s population lives on less than \$10 a day and 86% on less than \$30 a day. From the facts above, it can be concluded that continued economic growth is a way to reduce poverty.⁶ The United Nations Department of Economics and Social Affairs explains that worldwide consumption and production (a driving force of the global economy) rest on the use of the natural environment and resources in a way that continues to have destructive impacts on the planet. Economic and social progress over the last century has been accompanied by environmental degradation that is endangering the systems on which our survival depends.⁷

Is it possible to enjoy both economic growth and environmental sustainability? One of the main objectives of the OECD Environmental Strategy for the First Decade of the 21st Century, adopted by OECD Environment Ministers in 2001, is decoupling environmental pressures from economic growth. Decoupling can be defined as reducing the amount of resources used to generate economic growth while decreasing environmental deterioration and ecological scarcity. In 2014, United Nations Environmental Program (UNEP) carried out a study on technological possibilities and opportunities to accelerate decoupling and reap the environmental and economic benefits of increased resource productivity. The study concluded that it is not possible for a global economy based on the current unsustainable patterns of

⁶ Roser, M. (2021)

⁷ United Nation (2021)



resource use to continue into the future. Results are already visible in three areas: increases in resource prices, increased price volatility, and disruption of environmental systems. The environmental impacts of resource use are leading to potentially irreversible changes to the world's ecosystems that have direct effects on people and the economy (for example health damages, water shortages, loss of fish stocks, increased storm damage). But there are alternatives to these scary patterns. Many decoupling technologies and techniques that deliver resource productivity increases are already available.⁸

This report showed also that much of the policy design “know-how” needed to achieve decoupling is present in terms of legislation, incentive systems, and institutional reform. Many countries have tried these out with tangible results, encouraging others to study and where appropriate replicate and scale up such practices and successes.⁹

Under the auspices of the United Nations (UN), the sustainable development plan Agenda 2030 has developed. Agenda 2030 includes 17 Sustainable Development Goals (SDGs) including 169 targets for the development of the global economy and society in balance with the environment. The ultimate goal of this development plan is to end poverty, protect the planet, and ensure well-being for all. Achieving these goals includes, but is not limited to, decoupling, the transition from a linear economy to a circular economy, and much more that is not sensitive to measure by economic growth indicators.

The aim of this training material is to draw students' attention to the fact that a classic market economy based on the idea of continuous economic growth, is unlikely to bring us closer to the goal of increasing the well-being of society. This material introduces the idea of economic growth and explains the factors that drive economic growth; it reviews the study report where scientists conclude that on a finite planet Earth unlimited economic growth is impossible; it consists overview of the concept of economic development and sustainable development; it also gives overview of Agenda 2030 and SDGs. In 2015, UN member states approved the SDGs, which means that actions to achieve these goals have already been taking place for the past 7 years. During this training, we are looking for evidence that our country is working to achieve the goals of sustainable development.

1. Economic growth and economic development

Economic growth is one of the most important issues for entrepreneurs, households, and politicians. Economic growth is defined as the increase or improvement in the inflation-adjusted market value of the goods and services produced by an economy over time. This growth creates more profit for businesses and gives companies capital to invest and hire more employees. More jobs create incomes. If consumers have more money they buy additional products and services and these purchases drive higher growth. Better access to economic goods and services means

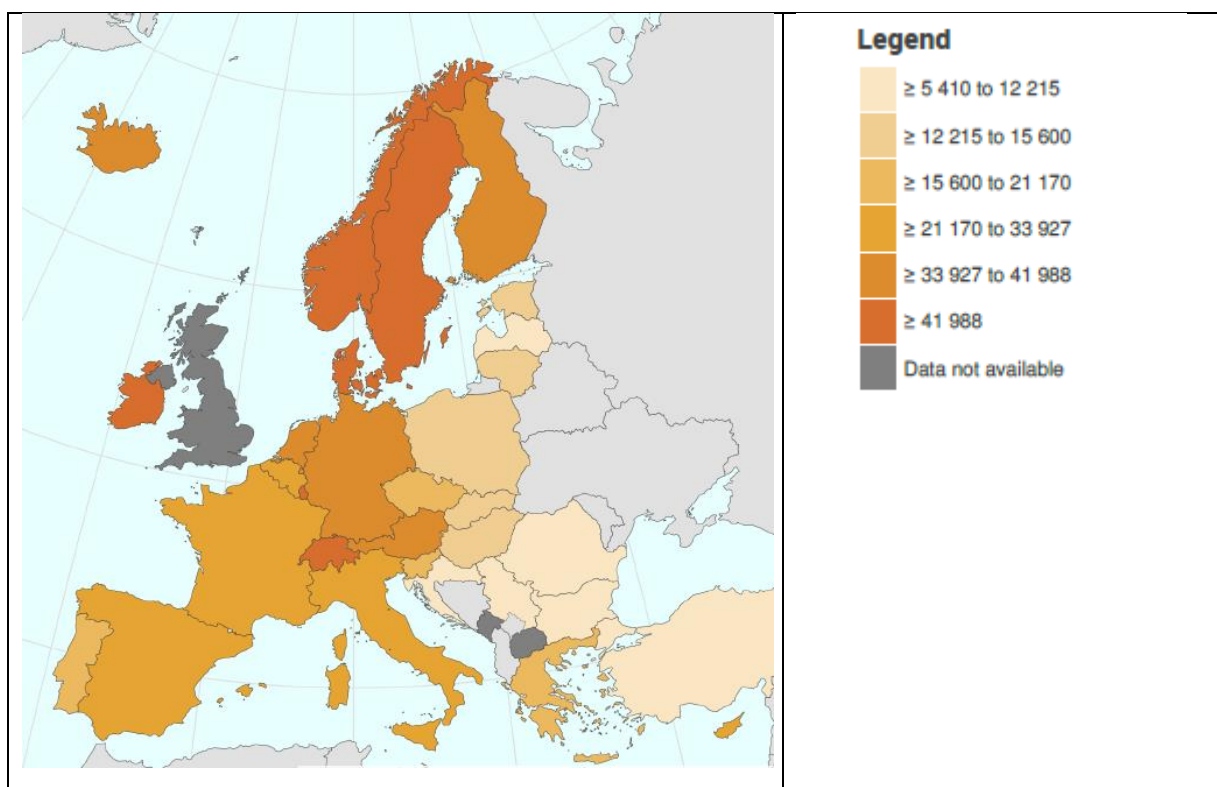
⁸ UNEP (2014)

⁹ Ibid



improvement of material standard of living. Politicians watch economic growth to discover what stage of the business cycle the economy is in. The best phase is when the economy is growing steadily. If growth is too far beyond the steady growth level the situation is called the overheating of the economy. This is what happened to the housing sector in 2005-2006 for example. If there is too much money and too few goods and services on the market, the situation is called inflation. At some point, confidence in economic growth dissipates, people prefer to sell rather than buy and the economy "cools down". When that phase continues long enough, it becomes a recession. One of the longest economic recessions occurred in 1929 and is called the Great Depression.¹⁰

The most widely used indicator to measure economic growth is gross domestic product (GDP). Gross domestic product is the total value of final goods produced in a given territory during the year. It includes all goods and services that businesses in the country produce for sale. It doesn't matter whether they are sold domestically or overseas. Most countries measure economic growth as the percent rate of increase in real GDP. As the economy actually grows only if its growth rate exceeds the population growth rate, the country's population is also taken into account when assessing economic growth. GDP per capita makes it possible to compare economic growth not only over time but across countries too.¹¹



¹⁰ The balance (2021)

¹¹ The balance (2021)



Figure 1. Gross domestic product of the European Union member states per capita in 2021.¹²

GDP is a proper indicator to measure economic growth as it takes into account the country's entire economic output. Figure 1 shows the GDP per capita of the EU Member States in spring 2021. The indicator in the figure is calculated as the ratio of real GDP to the average population of a given year and includes economic goods and services as well as products produced in a governing sector and non-profit institutions.¹³

The factors of production on which a country's economic growth depends are land, labour, capital and entrepreneurship.

The 'land' also includes other natural resources. Natural resources are parts of the natural environment that human society needs to exist and use in production. Examples of natural resources are rocks, minerals, liquids, gases and organic matter worth extracting. Natural resources are also water (especially groundwater), as well as natural forests, marine fish, game, in other words anything that is not created or made by man but is used in economic activities. Managed forests, domestic animals, cultivated land and other things that grow and develop under human care are not natural resources. They are the result of human activities. Natural resources may be renewable and non-renewable.

The 'labour force', i.e. the economically active population, is people who are willing and able to work, regardless of whether they have found a job or not.

The term 'capital' refers to things people use to create benefits in demand in the market. Tangible capital includes land, natural resources, buildings, animals and machinery. Examples of intangible capital are patents, copyrights and trademarks. Cash and cash equivalents are banknotes and liquid bonds in circulation in different countries. Capital is productive if it is used in business to generate income and profits, and it is non-productive if it is used in the public interest. Classical economic theory deals with capital only in physical objects, such as equipment, buildings and vehicles used in production. Some other economists have expanded the concept of capital and they observe investing in the skills and education of employees as building human capital.¹⁴

Entrepreneurship is the fourth factor that involves the visionaries and innovators behind the entire production process. Entrepreneurs combine all the factors of production described above to design, develop and produce the concept of their product or service.

The above listed production inputs are limited. By combining these limited resources, people have to make choices about what to produce, what factors of production to use, and how to

¹² Ibid

¹³ EuroStat. (2021)

¹⁴ Ibid



distribute the goods produced. At the same time, production should be organised in such a way that GDP is constantly growing.¹⁵

GDP and GDP per capita are very good indicators to measure the material affluence of a country but they do not say anything about the distribution of this wealth in the country. Rapid economic growth does not mean that an increase in wealth will improve the overall standard of living of the population. GDP does not include unpaid services like child care or other domestic work, volunteer work, illegal black-market activities as well as some environmental costs. It does not provide information on whether the daily needs of the population are met, does not show anything on the promotion of health, education, living conditions, natural environment, etc. GDP does not measure the satisfaction of needs or well-being of the population.¹⁶

A process aimed at the economic well-being and quality of life of a nation, region, local community, or individual that is run by the public sector is called economic development. Whereas economic development is a policy intervention aiming to improve the well-being of people, economic growth is a phenomenon of market productivity and increases in GDP is described as "one aspect of the process of economic development". When economists primarily focus on the growth aspect and the economy at large, leaders of community economic development concern themselves with socioeconomic development as well. In general discourse about economic development it is generally believed that this means creating jobs, increasing the wealth of both the individual and society, improving the quality of human life, but besides the above-mentioned aspects, economic development leads to economic restructuring as well as social and cultural changes, which can be difficult for society without a state-supported socio-economic environment.¹⁷

In 1934, J. Schumpeter emphasised the importance of non-economic, cultural and social factors as influencers of entrepreneurship. In the case of economic development, economic growth is achieved mainly through indirect factors (such as economic freedom, increasing the value of human capital, i.e. the development of knowledge, social capital and its development, etc.). Schumpeter points out that though the driving force of economic development is the innovative activity of the undertaking, which stems from its private interest and leads to economic development, the importance of the public sector as the creator of a favourable business environment cannot be underestimated.¹⁸

In 1956, R. Solow explained that economic growth should not be based on the intensive use of natural resources but on an increase in capital, labour, and technological development. A change in capital and / or labour leads to a change in technology or productivity and ultimately to a change in the volume or quality of production. This is called a neoclassical model of growth.

¹⁵ Kerem, 2004

¹⁶ Dang (2015)

¹⁷ Economic Development ... (2014)

¹⁸ Schumpeter, J. (1934)



This model is a further development of the classical model, with an emphasis on the supply side of economic activity and it ignores almost all the Keynesian details of aggregate demand.¹⁹

P.M. Romer (1986) studied knowledge as a form of capital, concluding that the long-term development of technology results from the accumulation of knowledge by profit-maximising and prudent economic agents.²⁰ As claimed by the new growth theory, the economy grows due to the development of knowledge, rather than as a result of increasing labour and capital. If you increase classical production inputs but reduce investment in human capital, infrastructure and research and development, the output cannot grow.²¹

Knowledge has also been seen as a positive externality. All individuals are ready to invest in knowledge only as much as is needed for personal gain. To achieve optimal social well-being, the state has to make additional investments in the acquisition of knowledge and develop policies that would bring knowledge-based entrepreneurship to the state.²²

R. A. Solo (1968) regarded economic development as the improvement of the economic well-being of a community in producing higher-value goods using the same resources as before. It means the increased capacity of society to provide its members with higher real incomes resulting from raised resource productivity and employment rates or in other words, an increase in material well-being of people through an improvement in their cultural and social quality. Well-being and cultural quality of individuals are the result of average income, income distribution, consumption patterns and relationships between individuals.²³

All authors mentioned above have noted that the public sector has an important role in economic development - they are a creator of a favourable economic and social environment for development. Economic development is linked to the following government policies²⁴:

1. Policies that achieve certain economic goals (such as sustainable growth, low unemployment and inflation, etc.);
2. Policies designed to provide public services (e.g. access to education, construction of the road network, access to medical care, etc.);
3. Policies aimed at improving the business environment (including tax policy, access to education and its content, family policy, etc.).

¹⁹ Solow, R. M. (1956)

²⁰ Romer, P.M. (1986)

²¹ Cornwall, Cornwall 1994, cited in Dang, Pheng (2015)

²² Dang, Pheng (2015)

²³ Solo, R. A. (1968)

²⁴ Economic Development ... (2014)



2. 'Limits to Growth' and decoupling

At the beginning of the 1970s, researchers at the Massachusetts Institute of Technology used a global development model to study how five key factors – population, agricultural production, natural resources, industrial production, and pollution – shape and constrain human existence. Past global developments were analysed and changes up to 2100 were forecast.

In the course of modelling, it was inferred that throughout the history of humankind, the usage of the above-mentioned resources has grown exponentially. On a planet Earth of limited size, the number of people, the area of cultivated land, and the amount of minerals to be mined cannot grow indefinitely. Known stocks of many major mineral resources will continue at the current rate of consumption growth for a few decades to a hundred years. Pollution is escalating at the same pace as production and consumption, thus affecting the possibility of a viable environment.²⁵

Assuming that human society continues to grow exponentially in the 21st century, the change in eight parameters was calculated up to 2100. These eight parameters include population, industrial production per capita, food production per capita, level of pollution compared to 1970, number of births per 1000 inhabitants, number of deaths per 1000 inhabitants, number of services per inhabitant per year. This analysis demonstrated that the depletion of resources and the increase in pollution will replace the current development by regression. All eight parameters under consideration will reach their maximum value, some earlier, some later in the first half of the 21st century, and then begin to decline. The authors called this scenario the standard model of development.²⁶

Forecasting the development of technology and analysing development scenarios based on future technologies, it became evident that technological development can postpone, but not avoid, critical moments of development. The study illustrates that the stable continuation of humanity is realisable, however, humanity must drastically change its current way of life.²⁷

In 2004, the same authors published the book 'Limits to Growth – 30 Years Later', which inferred that for thirty years human development has largely followed the standard scenario.²⁸ Ahead of the 40th anniversary of the study report, one of its authors published the report '2052. A Global Development Forecast for the Next Forty Years'. The report presents important indicators of the functioning of society during the forty years since the publication of 'The Limits to Growth' and forecasts the behaviour of humanity over the next forty years. This book addresses, among other things, anthropogenic climate change and corresponding challenges. It has been pointed out that in the second half of the last century, humanity exceeded the limits of

²⁵ Meadows, D.H., Meadows, D.L., Randers, J., Behrens, W. W. III (1972)

²⁶ Ibid

²⁷ Ibid

²⁸ Meadows, D., Randers, J., Meadows, D. (2004)



sustainable environmental use, and today the ecological footprint reaches approx. 1.4-1.5. This means that humanity exceeds the use of Earth's renewable resources by up to 1.5 times.²⁹

Over the years, besides these three reports have been published a number of studies and analyses which shows that economic growth as it has been treated for centuries is unsustainable. The ecological sustainability crisis and its consequences – the climate crisis, biodiversity loss, and diminishing natural resources – cannot be resolved without addressing the linear economic model and overconsumption. The linear economic model (see figure 2) means that more and more natural resources are continually included in the economy. When natural resources have been used for some time, they are removed from the economy as waste and pollution.

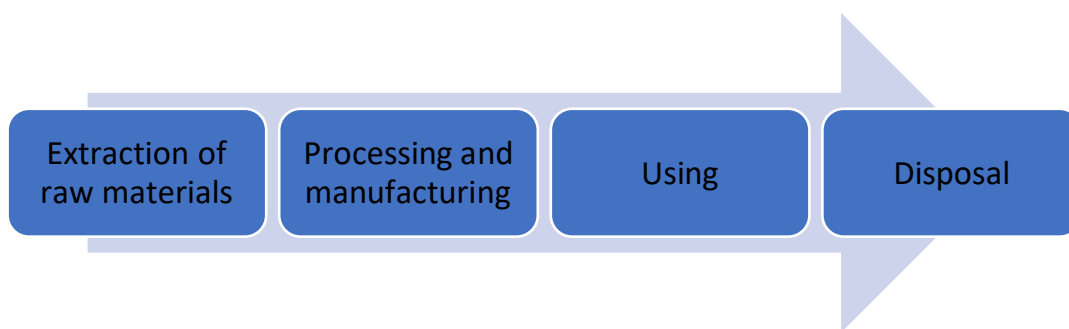


Figure 2. Linear economic model.

A linear economic model cannot guarantee the well-being of humankind and the environment and does not meet the long-term needs of modern society. The earth's natural resources are limited, which makes it important for the environment and economic development to find a sustainable way to use them.³⁰

Globally, the use of natural resources has more than tripled in 50 years, and the OECD estimates that it will almost double from the current level by 2060 unless we change our production and consumption habits.³¹

In the context of the transformation of the linear economy, the most common ideas are decoupling economic growth from natural resources, and the circular economy. The term ‘decoupling’ refers to breaking the link between “use of natural resources” and “economic growth.” Decoupling occurs when the growth rate of an environmental pressure is less than that of its economic driving force (e.g. GDP) over a given period. Decoupling can be either absolute or relative. Absolute decoupling is said to occur when the environmentally relevant variable is stable or decreasing while the economic driving force is growing and relative when the growth

²⁹ Randers J. (2012)

³⁰ European Parliament (2021)

³¹ Pajunen (2021)



rate of the environmentally relevant variable is positive, but less than the growth rate of the economic variable.³²

Direct practical action for decoupling is to implement the circulation of materials (see figure 3). The transition to a more resource-efficient circular economy offers a suitable solution, which in turn requires systemic changes in policy decisions as well as in the attitudes and behaviour of businesses, consumers and society. The aim of the circular economy is to decouple economic growth from the use of primary raw materials by creating a circular production and consumption system with the least possible losses. Resources need to be managed efficiently throughout their life cycle, from production and consumption to waste management and recovery, creating more value from existing resources while generating less waste. In addition to reducing the environmental impact, by effectively applying the principle of the circular economy, companies can reduce costs, increase their growth potential and promote their reputation. That is why it is important for the competitiveness and sustainable growth of a highly resource-efficient circular economy, focusing on existing materials and products: re-use, improvement, and recycling.³³



Figure 3. Circular economy ³⁴

The transition to a circular economy requires changes throughout the product value chain, from product design to new business models and consumption patterns. For new and existing products, the main focus is on life-cycle design, focusing on sustainable material selection, quality (long product life, room for improvement), supply chain optimization and reuse and repair (universality, component separation). In addition to smart designs, eco-innovation and

³² Ruffing (2022)

³³ European Parliament (2021)

³⁴ Ibid



technological development play an important role in supporting the reorientation of economic development. For the circular economy to reach its full potential, systemic thinking and changes in the whole socio-economic system are needed to bring about real change in consumption, production, planning, politics, lifestyles, culture and values.³⁵

The circular economy is a cross-sectoral principle, which is why cooperation between companies and international agreements are important, creating significant opportunities for the creation of new markets and partnerships. Successful cooperation between companies is well characterised by industrial symbiosis, the aim of which is to achieve a closed production cycle, where the waste, residual heat or other by-products of one company are used by another company.³⁶

Major changes are also needed in the way products and services are consumed. The daily choices of millions of consumers have a significant impact on the environment. Raising awareness and creating demand for sustainable products will contribute to the development of a green economy.

The role of the state in the transition to a circular economy is to pursue the goals of development at all levels and to create favourable conditions for the implementation of the principles of the circular economy and to remove obstacles.

3. Sustainable development

In 1987, the UN Committee on the Environment and Development issued a report on the future of humanity. This report described the concept of sustainable development for the first time. Sustainable development is defined as balanced development that meets the needs and aspirations of the present generation without compromising the analogical interests of future generations. The concept, which drew worldwide attention, was presented at the 1992 Rio de Janeiro Conference on Environment and Development and 193 countries approved this idea of economic development.³⁷

Sustainable development of society is a human-centred, or purposefully targeted development that ensures social justice and the improvement of people's quality of life in line with the nature of natural resources and the tolerability of ecosystems. On this basis, the concept of strong and weak sustainability has been proposed (see figure 4).

If problems are remedied based on technological replacement of the resources and services that nature provides then it is considered as weak sustainability. Weak sustainability is based on the

³⁵ Ibid

³⁶ Ibid

³⁷ The World Commission on Environment and Development (1987)

idea that manufactured capital can take the place of natural capital. Weak sustainability is supported by the idea that as long as natural capital is manufactured into something with the equivalent capital value, it can be used without constraint. This view on sustainability does not take into consideration that some services cannot be replaced, e.g. what do we do when there is no more ozone layer?³⁸

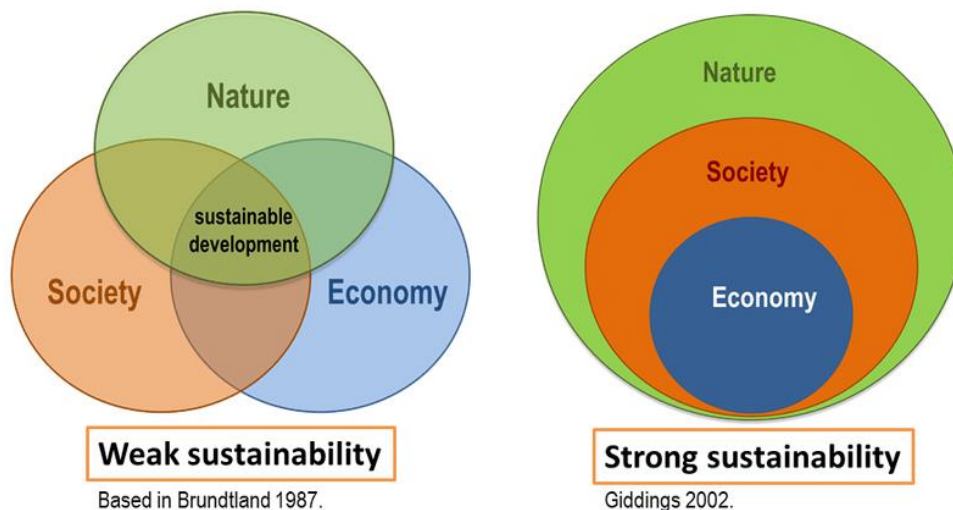


Figure 4. Weak and strong sustainability³⁹

Strong sustainability is an approach to sustainability that contends that existing natural capital cannot be duplicated or replaced. As such, it should be protected, maintained and enhanced in order to continue receiving the benefits of natural capital. Moreover, social elements need to be accounted for when aiming for sustainable development.

Strong sustainability is rooted in following principles⁴⁰:

- The scale of human activities should be constrained by the actual carrying capacity of the planet.
- Technological development should focus on improving the efficiency of resource use.
- Renewable natural capital should be sustainably managed by harvesting at rates not higher than regeneration rates and keeping waste production to levels that do not exceed the renewable assimilative capacity of the environment.
- Non-renewable natural resources should not be exploited faster than the rate of creation for renewable substitutes.

The standard of living of Western civilization has risen exponentially in recent decades, but the model of a consumer society that has fostered it has exacerbated inequalities in other countries

³⁸ Ecosystems United (2022)

³⁹ Ahuerma, I. M (2021)

⁴⁰ Ibid



and communities and caused damage to nature around the world. In order to change the situation on September 25, 2015, the 193 countries of the UN's General Assembly adopted Agenda 2030 that consists of 17 Sustainable Development Goals (SDGs). For each goal 8 to 12 specific targets are proposed along with indicators used to measure progress toward reaching the targets. The year by which the targets are meant to be achieved is between 2020 and 2030 but for some of the targets, no end date is given.⁴¹

This comprehensive set of goals aims to end poverty, protect the planet, and ensure prosperity for all. The SDGs place in stark light some of the seemingly intractable challenges facing the world including education, health, poverty, climate change and the gender divide. The pictograms in figure 5 show the areas of sustainable development and goals to reach.



Figure 5. Areas and goals of sustainable development until 2030.⁴²

The UN Sustainable Development Goals (SDGs) for 2030 are follows⁴³:

1. Eliminate poverty everywhere in any form.
2. Eliminate hunger, achieve food adequacy and better nutrition, and support sustainable agriculture.
3. Ensure good health and well-being for all age groups.
4. Ensure inclusive and fair quality education and lifelong learning opportunities for all.
5. Achieve gender equality and increase the empowerment of women and girls.
6. Ensure drinking water, sanitation and sustainable management of water resources for all.
7. Ensure affordable, reliable, sustainable and state-of-the-art energy for all.

⁴¹ Seventeen Goals Magazin (2021)

⁴² Introduction to.... 2021

⁴³ Seventeen Goals Magazin (2021)



8. Support sustainable, inclusive and sustainable economic development and ensure decent work for all.
9. Build resilient infrastructure, support inclusive and sustainable industrialisation and innovation.
10. Reduce inequality both within and between countries.
11. Make cities and settlements inclusive, safe, resilient and sustainable.
12. Ensure sustainable consumption and production.
13. Urgently implement measures to combat climate change and its effects.
14. Protect and make the use of oceans, seas and marine living resources sustainable in order to achieve sustainable development.
15. Protect and restore terrestrial ecosystems and promote their sustainable use; manage forests sustainably, combat desertification, halt and reverse soil degradation and biodiversity loss.
16. Support peaceful and inclusive societies to achieve sustainable development; provide justice for all and create effective, responsible and inclusive institutions at all levels.
17. Strengthen the methods for implementing the action plan and revitalise the Global Partnership for Sustainable Development.

The overarching goal of the Global Agenda for Sustainable Development is to eradicate poverty everywhere and to ensure a dignified and good quality of life for all, while respecting the capabilities of the natural environment. The objectives of the action plan focus on improving the economic, social and environmental situation. The goals apply to all countries and require input from governments, the non-governmental sector and the economic sector.

No reasonable person will find any of the SDGs to be inherently objectionable. In our modern, interconnected and global society, we should care about redressing all manner of issues plaguing economic growth and not placing continual human progress at risk.⁴⁴

4. Criticism of sustainable development idea and goals

Critics of Agenda 2030 have called it a ‘bubble’ with a beautiful vision that no country will take real steps towards, but its proponents have recognised that these are sketches showing the necessary direction, not a direct route to solving global problems *par excellence*. The stated objectives provide a structural background for a wide range of social initiatives and businesses with a social nerve. Besides, they offer a motivational slogan that forces countries to take responsibility for sustainable development and show results. It is a memorable frame that helps catch the attention of citizens.⁴⁵

⁴⁴ Moyo (2016)

⁴⁵ Solnik, S. (2018)



Lerch (2010)⁴⁶ and Hopkins⁴⁷ concluded that it is not possible to maintain the state of the environment in conditions of continuous economic growth. According to Lerch we should be preparing for change – society should be reorganised in a way where we are ready to survive the shocks of climate change and resource depletion. Hopkins sees a solution in community-based approaches: local food farming (also in cities); a community-owned energy network and alternative local money where possible.

'*Planetary Project*' sums up all criticism of the concept of sustainable development and its goals:⁴⁸

- The concept of 'sustainable development' is incorrect, and the internal logic of this concept is contradictory.
- The term is too narrow and labels global problems only within the environmental context. Thus, it is believed that only environmental concerns cover the entire strategy of sustainable development.
- The lack of a coherent concept of sustainable development, together with several definitions of the concept, causes significant difficulties in implementation.
- The selectivity of the concept of sustainable development, its original elitism and imperialist character will benefit only a certain part of humanity, not all people.
- The methods exploited in the concept of sustainable development are debatable. The extrapolated modelling used in the growth limits study cannot be definitive: it must be understood that predictions based on modelling will only materialise if all its assumptions materialise. The initial parameters of the model should be constantly updated based on the current situation.
- SDGs are understood in totally different ways. It stems from the cultural, social and political backgrounds of the participants applying the new model of civilization and from the different worldviews of the people. Undoubtedly, the greatest goal of the concept of sustainable development is to create a fair and balanced world. Nevertheless, it should be borne in mind that different countries, scientists and politicians interpret justice and balance differently. In itself, the readiness of humanity and individual countries for global integration, which requires a major transformation of their political and economic systems, is quite controversial.

Both opponents and proponents of the concept of sustainable development are convinced that the transition to sustainable development requires a dramatic transformation of the current civilization. At the heart of this transformation is the changing of all major human activities into sustainable ones. In particular, this means abandoning the hydrocarbon energy economy

⁴⁶ Perl, A., Miller, A., Ryerson, B., Sheehan, B., Schwartz, B., Martenson, C., Parker, C., Lerch, D., Fridley, D., Hughes, D., Orr, D., Allen, E., Flora, G., Brown, H., Kaufmann, J., Farley, J., Bomford, M., Shuman, M., Whybrow, P., Gilbert, R., Heinberg, R., Hopkins, R., Postel, S., Mills, S., Whipple, T., Karlenzig, W., Jackson, W., Rees, W., Barlow, Z. (2010)

⁴⁷ Transition Network. (2021)

⁴⁸ Planetary Project. (2021)



and switching to alternative energy sources. This technological development must also be socially acceptable. Still, the concept of sustainable development does not say anything about the sources of funding or the mechanisms for its implementation. Anyway, we do not have much time to save the world, so we should stop creating slogans and should take real action.

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Glossary

Capital	Capital means all the man-made goods that are used in the further production of wealth.
Circular economy	A circular economy entails markets that give incentives to reusing products, rather than scrapping them and then extracting new resources. In such an economy, all forms of waste, such as clothes, scrap metal and obsolete electronics, are returned to the economy or used more efficiently.
Decoupling	‘Decoupling’ refers to breaking the link between “use of natural resources” and “economic growth.” Decoupling occurs when the growth rate of an environmental pressure is less than that of its economic driving force (e.g. GDP) over a given period.
Economic development	Economic development generally means creating jobs, increasing the wealth of both the individual and society and improving people's quality of life.
Economic growth	Economic growth describes an increase in the quantity and quality of the economic goods and services that a society produces and consumes. Economic growth describes an increase in the quantity and quality of the economic goods and services that a society produces and consumes.
Entrepreneurship	Entrepreneurship is viewed as change, generally entailing risk beyond what is normally encountered in starting a business, which may include other values than simply economic ones.
Gross domestic product (GDP)	GDP is the total monetary or market value of all the finished goods and services produced within a country’s borders in a specific time period.
Labor	Labor is the economically active population is people who are willing and able to work, whether they have found a job or not.
Land	Land as a factor of production connects land, natural resources, forests, water resources and natural conditions
Limits to Growth	The Limits to Growth is a 1972 report on the exponential economic and population growth with a finite supply of resources, studied by computer simulation.
Linear economy	A linear economy traditionally follows the “take-make-dispose” step-by-step plan. This means that raw materials are collected, then transformed into products that are used until they are finally discarded as waste. Value is created in this economic system by producing and selling as many products as possible.



Sustainable development	Sustainable development can be defined as development that meets the needs of the present without compromising the ability of future generations to meet their own needs.
Sustainable development goals (SDG)	SDGs are a collection of 17 interlinked global goals designed to be a "blueprint to achieve a better and more sustainable future for all". The SDGs were set up in 2015 by the United Nations General Assembly and are intended to be achieved by the year 2030.
Well-being	Well-being is a positive outcome that is meaningful for people and for many sectors of society, because it tells us that people perceive that their lives are going well. Good living conditions (e.g., housing, employment) are fundamental to well-being. Tracking these conditions is important for public policy.