

## 2 Sustainable development goals – assessment and relationships

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### **Introduction**

A common element of the majority of the definitions of sustainable development is emphasising on the importance of the interrelationship between the development of civilisation and the protection and restoration of the natural and social environment. The definitions essentially indicate the need to protect the social and environmental *equilibrium* in the process of economic development, and their implementation is possible thanks to the global goals set, which in a more or less precise manner indicate the directions in which organisations and people should follow to care for both the environment and each other.

The strategic Sustainable Development Goals (SDGs) Developed by a broad *consensus* of the business milieus, political milieus and non-governmental organisations, constitute, first, new growth opportunities for businesses and, second, a chance to build sustainable, long-term competitive advantage. Its important sources include the possibility of creating and developing innovative products and services that meet the needs of increasingly aware and responsible consumers, as well as improving the reputation of enterprises. It is worth bearing in mind that, in addition to the opportunities arising from this, they also face challenges that are difficult to overcome in a changing environment (Urbaniec, 2018a). Accomplishing the SDGs is rendered more difficult because of numerous compromises accepted for the sake of economic growth at the expense of social well-being and the preservation of the environment; on the other hand, the concept of inclusive development emphasises the three dimensions of development: social, environmental and political (Fonseca et al., 2020). Regardless of the fact that the SDGs are of a global character, activities undertaken within their frameworks are of a local character, and depend on how far countries are from achieving the goals, and the sheer degree of development and commitment to sustainable development of each country influences its domestic interests and actions (Salvia et al., 2019).

## **SDGs in the past and now**

The outline of the history of the concept of sustainable development presented in Chapter 1 translates directly into change, or rather an evolution of goals adopted within its framework. Nevertheless, it does not change the fact that the crucial role in disseminating the idea of sustainable development is still played by the United Nations (UN) and its agencies.

A decisive influence upon the development of the concept of sustainable development was the report, published in 1987 and prepared by the World Commission on Environment and Development of the UN, where the main goal was to meet the needs of present and future generations in full compliance with the natural environment (WCED, 1987). Initiated at the Earth Summit in 1972, the concept of sustainable development, developed and perfected in the following years, took shape for the first time when its assumed premises were adopted as the basis for a plan of action at the second Earth Summit in Rio de Janeiro in 1992. It was then that the two most important documents were drawn up (United Nations, 1992):

- 1 *Rio Declaration on Environment and Development*, which contained the general philosophy and rationale for sustainable development; it additionally included assumptions of an ideological and postulative nature, indicating that not only material development but also the intellectual and spiritual development of the individual is crucial, and therefore a re-evaluation of existing lifestyles and ethical norms must be carried out to create a ‘conscious’ human being acting in a sustainable manner,
- 2 *Agenda 21*, that is, a plan containing the detailed principles and processes relevant to the implementation of this concept.

The conditions for sustainable development at that time included (among others)

- combating poverty,
- eradicating the unsustainable system of production and consumption,
- the protection of the environment, and its interdependence with peace and development,
- economic growth, which ought to result in increasing social cohesion (including, among others, the reduction of social stratification, the prevention of marginalisation and discrimination), and be conducive to the improvement of environmental quality (among others, by reducing the harmful effects of production and consumption on the state of the environment and the protection of natural resources) (United Nations, 1992; Dyr et al., 2019)

The declaration contained the postulates indicating that all human beings, societies and generations have the right to a healthy and productive life, and also to

develop in harmony with nature (United Nations, 1992). The passage of time, nevertheless, showed that the postulates contained therein were seen to be insufficient, excessively general and lacking precision, and work began that resulted in the UN Millennium Declaration prepared by world leaders in 2000. In this document, eight global development goals (MDGs – Millennium Development Goals) were adopted to improve the situation of people in developing countries, and these related to poverty reduction, access to education, gender equality, reduction of child mortality, reduction of the spread of HIV/AIDS and other major diseases, environmental protection and a global partnership for development. The Millennium Development Goals and their accompanying tasks are included in Table 2.1.

According to the declaration, the goals implemented from 2000 until 2015 were aimed at poorer, developing countries, and the cost of the implementation of relevant programmes was estimated to amount to, approximately, 600 billion USD (Rokicka & Woźniak, 2016). According to expert assessments, the goals have not been fully accomplished, especially in terms of social inequality, unemployment or the excessive exploitation of natural resources, and, moreover, the extent to which MDGs were accomplished in different countries was also different. Instead, their implementation has proven that different actors: national governments, the private sector, civil society and scientists can work together successfully.

Accomplishing the Millennium Development Goals was jeopardised throughout the entire period of 15 years by numerous determinants of various natures. The first group of barriers was politically motivated and related to authoritarian or even totalitarian governments, the lack of democracy, the rule of law and respect for human rights. The second group of jeopardising factors was connected with an excessively strong, and mostly negative influence of culture and religion on the education of children and the behaviour of large social groups. The third group was linked to demographical phenomena related to natural movement, influencing rapid population growth in underdeveloped countries, which unequivocally exacerbated their social, economic, political and environmental problems, migratory movement (e.g. from rural areas to cities and from economically backward regions to highly developed countries) resulting in the amplification of selected threats (slums) and their spread to highly developed countries (Czaja, 2016). However, according to the UN, it has succeeded, among other things, in reducing extreme poverty, increasing access to clean drinking water and to primary education (Gruchelski & Niemczyk, 2016).

The above-mentioned goals came under fire because of (1) not being particularly challenging – they were seen as ineffective drivers of progress, (2) the lack of well-founded reasons for choosing these specific goals whilst rejecting others (Deneulin & Shahani, 2009), (3) the lack of resources to implement them (Kabeer, 2010), and (4) a very simplistic concept of development connected with

Table 2.1 Summary of the sustainable development goals

<i>Name and year of publication of goals</i>	<i>Goals and tasks</i>	<i>Number of indicators</i>
1972 1987	Call for strengthening environmental management policies while developing global economies Meeting the needs of present and future generations in full compliance with the needs of the environment	NONE NONE
Millennium Sustainable Development Goals (MDGs) 1992	<p><b>1. Eliminating extreme poverty and hunger:</b></p> <ul style="list-style-type: none"> <li>a. Reducing by half by 2015, compared to 1990, the number of people whose daily income is below 1 USD</li> <li>b. Reducing by half by 2015, compared to 1990, the number of people suffering from hunger</li> </ul> <p><b>2. Achieving global primary education</b></p> <ul style="list-style-type: none"> <li>a. Ensuring that by 2015, children around the world – both boys and girls – will be able to complete primary education</li> </ul> <p><b>3. Empowering women and promoting gender equality:</b></p> <ul style="list-style-type: none"> <li>a. Eliminating gender disparity in primary and secondary education by 2005, and in all levels of education by 2015.</li> </ul> <p><b>4. Reducing child mortality:</b></p> <ul style="list-style-type: none"> <li>a. Reducing the under-five mortality rate in the period between 1990 and 2015</li> </ul> <p><b>5. Improving maternal health:</b></p> <ul style="list-style-type: none"> <li>a. Reducing by 2015, compared to 1990 the maternal mortality ratio by 75%</li> </ul> <p><b>6. Ensuring environmental sustainability:</b></p> <ul style="list-style-type: none"> <li>a. Integrating the principles of sustainable development into every nation's policies and programmes and also reversing the depletion of environmental resources</li> <li>b. Reducing by half the proportion of the universal population without sustainable access to clean and safe drinking water and basic sanitation by 2015</li> <li>c. Achieving substantial improvement in the lives of a minimum of 100 million slum dwellers by 2020.</li> </ul>	60

(Continued)

Table 2.1 (Continued)

Name and year of publication of goals	Goals and tasks	Number of indicators
2030 Agenda (SDGs) 2015	<p><b>7. Combating AIDS, malaria and other diseases:</b></p> <ul style="list-style-type: none"> <li>a. Halting and having started by 2015 to reverse the spread of AIDS</li> <li>b. Having ceased and started the reversal of the incidence of malaria and other major diseases by 2015</li> </ul> <p><b>8. Developing and intensifying global partnerships for development:</b></p> <ul style="list-style-type: none"> <li>a. Ensuring the further development of an open, predictable, rule-based, non-discriminatory trading and economic system, including a commitment to good governance, development and poverty reduction – both nationally and internationally</li> <li>b. Addressing the special needs of the least developed countries and, in particular, allowing these countries to export without tariffs or quotas; expanding the debt relief programme for the most indebted poor countries and cancelling debts incurred through bilateral aid; more generous government development assistance to countries committed to poverty reduction</li> <li>c. Addressing the special needs of small island developing States and landlocked developing countries (within the framework of the Programme of Action for the Sustainable Development of Small Island Developing States and the recommendations of the XXII Extraordinary Session of the UN General Assembly)</li> <li>d. Dealing exhaustively with the debt problems of developing nations by taking the necessary measures domestically and internationally to maintain long-term debt sustainability</li> <li>e. Developing and implementing, in collaboration with developing countries, strategies rendering it possible for young people to find decent work</li> <li>f. Providing access to affordable essential drugs in the developing world – in collaboration with pharmaceutical companies</li> <li>g. Availing benefits of new technologies, especially information and communications, in collaboration with the private sector</li> </ul> <p><b>1. No Poverty:</b> End poverty in all its forms, everywhere (<i>Economic</i>)</p> <p><b>2. Zero Hunger:</b> End hunger, achieve food security and improved nutrition and promote sustainable agriculture (<i>Economic</i>)</p>	230

3. **Good Health and Well-Being:** Ensure healthy lives and promote well-being for all at all ages (*Economic*)
4. **Quality Education:** Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all (*Social*)
5. **Gender Equality:** Accomplish gender equality and empower all women and girls (*Social*)
6. **Clean Water and Sanitation:** Ensure available and sustainable management of water and sanitation for all (*Economic*)
7. **Affordable and Clean Energy:** Ensure access to affordable, reliable, sustainable and modern energy for all (*Economic*)
8. **Good Jobs and Economic Growth:** Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all (*Economic*)
9. **Industry, Innovation and Infrastructure:** Build resilient infrastructure, promote inclusive and sustainable industrialisation and foster innovation (*Economic*)
10. **Reduced Inequalities:** Reduce inequality within and among countries (*Social*)
11. **Sustainable Cities and Communities:** Make cities and human settlements inclusive, safe, resilient and sustainable (*Environment*)
12. **Responsible Consumption and Production:** Ensure sustainable consumption and production patterns (*Environment*)
13. **Climate Action:** Take urgent action to combat climate change and its impacts (*Environment*)
14. **Life Below Water:** Conserve and sustainably use the oceans, seas and marine resources for sustainable development (*Environment*)
15. **Life on Land:** Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss (*Environment*)

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(Continued)

Table 2.1 (Continued)

Name and year of publication of goals	Goals and tasks	Number of indicators
16.	<p><b>Peace, Justice and Strong Institutions:</b> Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels (<i>Social</i>)</p>	
17.	<p><b>Partnerships for the Goals:</b> A successful sustainable development agenda requires partnerships between governments, the private sector and civil society. These inclusive partnerships built upon principles and values, a shared vision, and shared goals that place people and the planet at the centre, are needed at the global, regional, national and local levels (<i>Social</i>)</p>	

Source: Own elaboration upon the basis of United Nations (1992, 2015a); WCED (1987).

meeting basic needs, without the challenges of integration, and also sustainable growth and development (Moore, 2015). However, there were also uncritical supporters of the implementation of the Millennium Development Goals, who presented the results achieved by 2015 in a rather optimistic way. The detractors indicated that not only did the particular goals and tasks remain unaccomplished, but in certain aspects, the situation also had even deteriorated.

The continuation of the Millennium Development Goals is the 2030 Agenda, which was drawn up in 2015, and for which another 15-year period of implementation was planned. While the goals of the Millennium Declaration were mostly focused on the poorest countries, the reason for the creation of the SDGs was to include goals that attract and encourage action by all countries and to target these actions to domestic socio-economic policies, as well as the implementation of the global Paris Agreement (of December 2015) on halting climate change (Fayomi et al., 2018).

It was also important to develop the goals that focus on the interdependencies between two or more dimensions so that they are addressed in an integrated way, ensuring the desired outcomes for both (Griggs et al., 2014).

The integral part of the 2030 Agenda are the tools for its implementation, contained in the so-called *Addis Ababa Action Plan*, including tools and means (resources), both provided by the budgets of particular countries and coming from private sources, as well as relief funds, rendered available to support the development of poorer countries (United Nations, 2015b). World leaders and heads of government signing the resolution, from both developed and developing countries, pledged to make concerted efforts to achieve sustainable development. According to the provisions of this resolution, implementation should involve governments of all countries, parliaments, UN structures, various international institutions, local authorities, societies, academia, business and the private sector (United Nations, 2015b).

The 2030 Agenda includes 17 main SDGs, 169 specific tasks and 230 monitoring indicators, under the economic, environmental and social dimensions (Dlouhá & Pospíšilová, 2018). The goals of the 2030 Agenda, its tasks and categorisation relevant to the 3 dimensions of sustainable development, are presented in Table 2.1.

It is assumed that the stakeholders of Agenda 2030 include enterprises from both the private and public sectors, and their economic, social and environmental goals should be consistent with the above-mentioned SDGs. A factor conducive to meeting the postulates arising from the SDGs is the fact that many systemic requirements are imposed on enterprises wishing to operate the market – both obligatory and optional (Wiśniewska & Wyrwa, 2022).

While it was claimed that none of the MDGs were sufficiently ambitious, some of the SDGs are claimed to be excessively ambitious and impossible to be accomplished. For example, the MDGs were about reducing poverty, and the SDGs were about eradicating poverty (which doesn't seem possible). Some



adhere to the opinion that SDGs are theoretical, that all are treated as priorities, and that means that none of them is really a priority (Easterly, 2015).

The negative assessment also relates to the tools in use; both kinds of goals were, and still are, assessed with the application of different methods and varied tools, frequently varying from country to country, which renders it difficult to compare them properly and to analyse progress (Pogge & Sengupta, 2015). As researchers on the topic point out, more goals and indicators prepared for them does not mean that these goals will be better; on the contrary, in fact, in many cases, they might cause an unwelcome confusion (Zondervan, 2017). Some of them ought to be limited and a set of feasible, measurable and transparent targets should be established to facilitate both easier and more effective decision-making as well as comparisons (Venkatesh, 2021).

It is worth remembering that a key role in accomplishing the SDGs is played by the private sector, and, here, the starting point for consideration is the hypothesis that larger and/or more powerful companies, by engaging in relationships with smaller actors, can both contribute to and impede the achievement of the goals. Elements of the organisation that may strongly influence them include certain values, for example greed or rivalry, which may be perceived as normatively neutral, and even as required qualities (Zawadzki, 2014). Other barriers to goal implementation include a lack of state support in the implementation of the SDGs, their excessive distance from business goals or a low culture of collaboration in accomplishing non-business goals (Urbaniec, 2018b).

The unsatisfactory extent of accomplishing the SDGs may be the result of the behaviours of enterprises resulting from the influence of the ideology of building shareholder value. It motivates enterprises to retain as much of their value as possible, and it should be borne in mind that the active involvement of large companies in the achievement of certain goals may risk a lack of growth in retained value and therefore, may result in a failure to generate further profits for the shareholders (Gulski, 2021).

The COVID-19 pandemic also poses a threat to the SDGs, with negative impacts on developed countries and even more unfavourable impacts on developing countries, which do not have the resources to cope with the economic and social challenges caused by the pandemic. The economic stagnation associated with COVID-19 is estimated to plunge 420–580 million people into poverty, increasing global poverty for the first time since 1990 (Sumner et al., 2020).

COVID-19 led to the lower achievement of the SDGs (Shulla et al., 2021), but at the same time, contributed to the development of the digitalisation and consolidation of health, educational and social services, as pro-growth government spending, often during a crisis, has significant positive effects in the social care, health and education sectors (Reeves et al., 2013). In terms of meeting environmental goals, COVID-19 has resulted in improved air quality and reduced CO<sub>2</sub> emissions (Shulla et al., 2021).

The threats to the implementation of the SDGs resulting from the pandemic include (Kaczmarek, 2020)

- the focus of governments on their own country and its own goals and tasks;
- reducing official development aid and other sources of development financing;
- weakening the system of global collaboration;
- changing political priorities at the expense of economic development;
- re-prioritising research funding hitherto aimed at solving problems in developing countries;
- undermining the free market and seeking a new paradigm for the global economy.

### **Relationship between the SDGs**

The concept of the SDGs, in contrast to that of the MDGs, indicates an integrated approach to decision-making and includes a policy focusing not only on individual components/dimensions of sustainable development separately but also takes into account their interconnectedness and interdependence to reduce compromises, as well as create and use the synergy effect (van Tulder, 2018). Synergies between sustainability goals largely outweigh compromises, but interestingly, negative correlations are observed across all the SDGs. Moreover, correlations are systematically assessed not only between goals but also between SDG indicators, and so (Pradhan et al., 2017):

- 1 a statistically significant positive correlation between a pair of SDG indicators is identified as a synergy,
- 2 a statistically significant negative correlation between pairs of SDG indicators is classified as a compromise.

As part of the process of assessment, the synergies and compromises between the pairs of the SDGs are categorised on the domestic and global scale, so as to, in further course, identify the most frequent interactions occurring between them (Pradhan et al., 2017). The crucial issue within the frameworks of the described interactions of the SDGs, encompassing the compromises and synergies between goals (SDG) and within the frameworks of their indicators, are contradictions between economic growth and the sustainable use of resources (Nilsson et al., 2016). Nevertheless, it ought to be indicated that the negative interactions are regarded as the perfect introduction to a dialogue between science and politics (Obersteiner et al., 2016), which frequently stimulates further work within a relevant field. The inconsistency and incoherence in the sustainability goals relate to indicators in the quantitative dimension – although research presents the indicators, they are hampered by severe data limitations and do not inform decision-makers about which of the underlying economic, social or

environmental pillars have a significant impact on sustainability, and from an organisational perspective this is crucial (Bali Swain & Yang-Wallentin, 2020; Spaiser et al., 2017).

Based on the research conducted so far, three general types of interactions between SDG targets have been identified (Nilsson et al., 2016):

- a positive dynamics – positive interactions between the SDGs occur when the SDGs are active, reinforcing or indivisible,
- b neutral or coherent dynamics – describe a situation where contributions towards one goal do not result in significant positive or negative interactions with another goal,
- c negative dynamics – interactions arise when goals are constraining, counter-acting, or cancelling.

There are few SDGs that focus exclusively on social issues or solely on environmental or relational issues. All of them quite substantively link at least two of the three dimensions. The exceptions are SDG 11, which includes all three elements, and SDG 17, which moves relational issues to the operational level (Gupta & Vegelin, 2016).

The cause-and-effect relationships between the SDGs can be seen from the first cursory analysis – they can be seen, for example, between increasing employment and reducing poverty, between reducing poverty and improving the natural environment. It is worth noting that improvements towards one SDG can enhance or harm the development or improvement of another goal (Barbier & Burgess, 2019). Other relationships of the SDGs are outlined below:

- 1 no poverty (SDG1) may be enhanced by the benefits of improved water quality and sanitation (SDG6), and also zero hunger (SDG2) (Fuso Nerini et al., 2018)
- 2 SDG12 (responsible consumption and production) is the goal most closely related to commerce (Pradhan et al., 2017)
- 3 SDG 02 (Zero hunger) and SDG 01 (No poverty) and SDG 03 (Good health and well-being).
- 4 SDG 03 (Good health and well-being) and SDG 08 (Decent work and economic growth).
- 5 SDG 06 (Clean water and sanitation) and SDG 12 (Responsible consumption and production).
- 6 SDG 07 (Affordable and clean energy) and SDG1 (No poverty), SDG2 (Zero hunger), SDG3 (Good health and well-being), SDG8 (Decent work and economic growth), SDG13 (Climate action).
- 7 SDG7 (Affordable and clean energy) and SDG6 (Clean water and sanitation)
- 8 SDG8 (Decent work and economic growth) and SDG1 (no poverty) (Singh et al., 2018).

- 9 SDG 11 (Sustainable cities and communities) and SDG 03 (Good health and well-being).
- 10 SDG 12 (Responsible consumption and production) and SD6 (Clean water and sanitation).
- 11 SDG13 (Climate action) and SDG15 (Life on land).
- 12 SDG13 (Climate action) and SDG14 (Life below water)
- 13 SD14 (Life below water) and SDG1 (No poverty), SDG2 (Zero hunger) and SDG8 (Decent work and economic growth).
- 14 SDG15 (Life on land) and SDG1 (No poverty), SDG2 (Zero hunger), SDG8 (Decent work and economic growth), SDG13 (Climate action) and SDG14 (Life below water).
- 15 SDG7 (Affordable and clean energy) and SDG6 (Clean water and sanitation)

## **Conclusions**

The development, both quantitative and qualitative, of the SDGs that have been developed and adopted in successive years shows how strongly global problems related to human activities are escalating. The transition from the 1987 principal goal to the Millennium Goals to the 2030 Agenda goals indicates ever-expanding problems in all dimensions of sustainable development. The road to quantifying and monitoring the SDGs is still challenging – there is a need for a deep understanding of sustainable development, commitment and capacity to operationalise and implement its multidimensional goals, access to data, expertise, analysis and interpretation of results. As practice shows, there is still a conflict between socio-economic development and the environmental dimension, making it difficult to identify and implement the most effective strategy for creating sustainable development (Redclift, 2005). In addition, doubts arise to what extent such a broad and global sustainable development program such as the 2030 Agenda can be effectively implemented, especially in the face of the diverse economic and political interests of various social groups, states and blocs, the oligarchisation of certain economies, the weakening role of states with the parallel strengthening of the role of transnational corporations and global finance (Gruchelski & Niemczyk, 2016). Perhaps the biggest reason for the failure to establish global sustainable socio-economic development is also the structure of aid offered to poor countries. To a greater extent, these countries are provided, for commercial reasons, with means of consumption, instead of means of production and infrastructure (Gruchelski & Niemczyk, 2013).

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