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Sustainability, Resilience and Development

In line with the goals of the 2030 Agenda and the *Strategic Foresight Report – Charting the Course towards a More Resilient Europe*, sustainability, resilience and development are the three key concepts, indivisible and interconnected, for building the Europe of the future: a systemic vision to promote sustainable economic growth without neglecting environmental and social aspects. This means that a more sustainable future is the result of ethical and sustainable business models, production and consumption patterns evaluated according to techniques that quantify the environmental impact of products or processes throughout their life cycle. The unsustainable use of the planet's resources and the effects of climate change are undermining the livelihoods of many countries and regions, due to water and land scarcity, food insecurity and migration. This chapter analyses these aspects, highlighting how the concept of "sustainability" can also be applied to linguistic reality by referring to the struggle to preserve linguistic diversity and maintain the identities of minority communities.

Keywords: sustainability, resilience, development

Acronyms

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Introduction

Sustainability, resilience and development are the pillars chosen by UN member states to build the future of Planet Earth. Sustainability, resilience and development from an economic, social and environmental point of view. Different and separate concepts which, however, are necessary to look at as an integrated whole, in a holistic view.

The term "sustainable development" became a common expression in 1987, with the publication of the Brundtland report (also known as *Our Common Future*) by the World Commission on Environment and Development (WCED), but the roots of the political and juridical debate about the necessity to link development and environment can be found at the beginning of the seventies with the publication of the report *The Limits* of Growth (commissioned by the Club of Rome to the Massachusetts Institute of Technology) and, above all, with the 1972 United Nations Conference on the Environment, held in Stockholm. Specifically, the *Stockholm Declaration for the Human Environment* affirmed 26 principles aimed at preserving the human environment "for all the people and for their posterity".

Gro Harlem Brundtland, President of the WCED at that time, defined sustainable development as the capacity to "meet the needs of the present without compromising the ability of future generations to meet their own" (BRUNDTLAND 1987). The Brundtland Report played a pivotal role during the 1992 United Nations Conference on Environment and Development, which adopted the Rio Declaration on Environment and Development. The "Rio Declaration" recognises the "integral and interdependent nature of the Earth, our home". In the first principle it states that "human beings are at the centre of concerns for sustainable development. They are entitled to a healthy and productive life in harmony with nature".

The concept of "sustainable development" contains some fundamental elements: an obligation towards current and future generations, extending the field of obligation to an indefinite future; a principle of intragenerational and intergenerational temporal continuity; the idea of the satisfaction of needs as a condition of well-being extended to all individuals. These elements indicate a purpose, a common direction towards which to strive in sustainable action.

From a philosophical and anthropological point of view, the importance of the needs of future generations was not a new concept, specifically, if a more ecological, non-anthropocentric perspective is assumed, as, for example, that of the Iroquois Northern American tribes which demanded that tribal leaders make decisions in the present by evaluating and considering the needs of future generations (COSMULESE 2019).

The concept of sustainability becomes mature in the 1980s but is covertly traceable in modern economic thought. The study between the need for economic growth and the problem of the exploitation of natural resources is already present in the reflections of Robert Thomas Malthus (MALTHUS 1798), David Ricardo (RICARDO 1821) and John Stuart Mill (MILL 1909 [1848]).

The relationship between economic growth and the exploitation of natural resources as a limit to the carrying capacity of ecosystems stressed by human socio-technical systems is made explicit in the first reports of the Club of Rome in the late 1960s. Furthermore, Lester Brown's idea of sustainable society (BROWN 1981), that is, of sustainability as the production of society, dates back to 1981.

Sustainability is at the centre of international debate and represents the primary goal of many projects globally. Among all, the 2030 Agenda and its 17 Sustainable Development Goals was signed by 193 members of the United Nations in 1995. The 17 Goals refer to a set of important development issues that consider the three dimensions of sustainable development – economic, social and ecological – and aim at ending poverty, fighting inequality, tackling climate change, and building peaceful societies respectful of human rights. More often the concept of sustainable development is combined with resilience,

which adds a new nuance to sustainability, enriching it and making it more suitable for today's world.

Resilience indicates a set of skills that allow an individual, a community, an economy to resist and counter situations of discomfort and deprivation through the effective use of adaptive behaviours. Being resilient means knowing how to orient yourself towards the future; being able to face and manage changes, know how to make decisions and, in this way, know how to manage the uncertainties and fears related to the occurrence of critical moments. It is something about how humans and nature can use shocks (for example, climate change and economic crises) to renew themselves and use new ways of thinking (BIGGS et al. 2015).

If the concept of sustainable development aims at a development that can partly avoid changes and their negative consequences for man and the environment, resilience aims instead at reaching a condition in which it is possible to confront and overcome the changes, without being completely overwhelmed. Moving from a vision that focuses efforts on the idea of sustainability to others that focus on resilience means changing your point of view and integrating different approaches to be able to achieve a better result.

On 9 September 2020, the European Commission presented the *Strategic Foresight Report – Charting the Course towards a More Resilient Europe* (European Commission 2020a). The report, also due to the Covid-19 pandemic, underlines how Europe needs to strengthen its resilience, which is the ability to face challenges and to initiate transition processes in a sustainable, equitable and democratic way. The report analyses four interconnected dimensions:

- socio-economic resilience to identify future skills in which to invest today and to initiate a broader dialogue with society on updating the social and fiscal contract
- geopolitical resilience to help identify scenarios and define strategic options to strengthen the EU's open strategic autonomy
- green resilience to explore the engines of change, to understand future structural changes in the labour market and to guide the retraining of people who have lost their jobs during the crisis or who risk losing it in the future due to technological developments and automation.
- digital resilience to predict how major emerging technologies might develop, to understand their impact on all areas of life and to seize future opportunities

Sustainability and resilience look to the future and find their foundation in the dimension of the possible. The goal is projected into a future time. The concept of sustainable development shifts the field of enquiry from the present situation to a desirable one (from being to ought to be) to ensure intergenerational and intragenerational equity.

Sustainability and the resilience paths to support them are configured as a moral obligation, a general obligation, not specifically aimed at someone, to preserve the possibility of well-being. Sustainability is an injunction not to meet our needs to the detriment of the impoverishment of our successors (ANAND–SEN 2000).

Sustainability becomes the most resilient response that the world can give itself in anticipation of a danger considered to be imminent as we have reached the stage where our collective conduct will determine not only the quality of life of future generations, but the very existence of human life as we know it (CRUZ 2007).

This appears particularly true if we look at climate change which is strictly related to sustainable development. Actually, the first target of the 13th Sustainable Development Goal – 2030 Agenda *(Take urgent action to combat climate change and its impacts)* aims at strengthening "resilience and adaptive capacity to climate related hazards and natural disasters in all countries". In this wake, in February 2021, the European Commission adopted the new European strategy to become climate resilient by 2050 in the frame of four principal objectives: make adaptation smarter (1), swifter (2) and more systemic (3) and to step up international action on adaptation to climate change (4). The European Commission emphasises the need to act now and quickly because "climate change is happening today, so we have to build a more resilient tomorrow [...]. People, planet and prosperity are vulnerable to climate change, so we need to prevent the un-adaptable and adapt to the un-preventable" [European Commission COM (2021)82 final].

Ecological sustainability

"A great change in our stewardship of the Earth and the life on it is required, if vast human misery is to be avoided..."; this was the general conclusion of the Union of Concerned Scientists and more than 1,700 independent scientists who collaborated to pen the 1992 World Scientists' Warning to Humanity in which they highlighted that humans were on a collision course with the natural world (RIPPLE et al. 1992). In the same years, several ecologists argued about the fact that the scope and magnitude of environmental problems threatened the sustainability of Earth's life-support systems. Environmental sustainability is a key issue for human societies throughout the 21st century's world. The sustainability of natural ecosystems can be defined as the dynamic equilibrium between natural inputs and outputs, modified by external events such as climatic change and natural disasters. As soon as ecosystems' resources are utilised by humans, the question arises to what extent human utilisation and disturbance interrupt the ecosystem's capacity to persist (FRESCO-KROONENBERG 1992). This aspect is strongly related to the concept of resilience of the ecological systems that is the distance between the current state of the system and the thresholds at which they may quickly change to a different regime with different functions and therefore different value of their services (MÄLER 2008). The services provided by the ecosystems to our societies are of fundamental importance to human well-being, health and survival. Even though some environmental resources have historically been free to the users and ecosystem services are not fully included in commercial markets, their global value is changed in time (COSTANZA et al. 2014).

All these concepts introduce "sustainable development" that was defined by the Bruntland commission as "...development that meets the needs of the present without compromising ability of the future to meet their own needs" (BRUNDTLAND 1987); in other terms, sustainable development is the provision of productive resources to future generations to make it possible for them to live as well as the present generation.

Since the end of the 1980s, the issues of sustainable development have been discussed in many events organised at an international and global level. During the 1992 Rio de Janeiro Summit, the concept of sustainability was pointed out and the foundations were laid for Agenda 21 (the memorandum of understanding developed by the International Council for Local Environmental Initiatives) with the goal of transferring the concepts of sustainable development to the level of local administrations. The 1995 World Summit for Social Development, held in Copenhagen, addressed the social dimension of globalisation for the first time at the highest political level, giving full recognition to the social and economic components of sustainable development. The integrated vision of the three dimensions of sustainable development reaches up to 2015, the year of birth of the Agenda 2030 for sustainable development, which includes 17 objectives related to ecological sustainability and resilience, but also to human dignity, regional and global political stability and economic prosperity. In January 2020, the investment plan for the European Green Deal 2050 was presented in Strasbourg; it is the most ambitious ecological transition plan to achieve zero emissions by 2050. However, a report of the United Nations Environment Programme (UNEP) has already highlighted the linkage between environmental problems, economic health and equity issues. So, if the core problems of the environment are in great measure ecological, their causes and consequences are largely anthropogenic; consequently, it is necessary to change our approach to economic and social development towards a much more sustainable, appropriate one and the solutions need to involve partnerships among scientists from a broad range of discipline.

Life Cycle Thinking

Life Cycle Thinking (LCT) is a holistic approach for ensuring the transition towards more sustainable production and consumption patterns (NAZIR 2017). In each life cycle stage, there is the potential to reduce resource consumption and improve the performance of products. A product life cycle begins with the extraction of raw materials from natural resources and continues with production, packaging, distribution, use, maintenance and eventually recycling, reuse, recovery or final disposal (UNEP/SETAC - Life Cycle Initiative 2012). Life cycle thinking means we recognise how our choices influence what happens at each of these points so we can balance trade-offs and positively impact the economy, the environment and society. A life cycle approach is a way of thinking which helps us recognise how our selections - such as buying a product - are one part of a whole system of events. Life cycle thinking helps us avoid short term decisions that lead to environmental degradation. A life cycle approach identifies both opportunities and risks of a product or technology, all the way from raw materials to disposal. This helps to improve entire systems, not single parts of systems, by avoiding decisions that fix one environmental problem but cause another unexpected or costly environmental problem (like mitigating air pollution, yet increasing water pollution). It means we look for unintentional impacts of our actions (such as damaging a natural ecosystem or inadvertently supporting unfair labour conditions and wages) and take some action

to prevent those impacts. The main goals of LCT are to reduce a product's resource use of and emissions to the environment as well as improve its socio-economic performance through its life cycle. Life Cycle Thinking (LCT) is about going beyond the traditional focus on production site and manufacturing processes to include environmental, social and economic impacts of a product over its entire life cycle (UNEP 2004). Life cycle thinking helps in this way avoid shifting problems from one life cycle stage to another, from one geographic region to another and from one environmental medium (air, water or soil) to another. This enables product designers, service providers, government agents and individuals to make choices for the longer term and with the consideration of all environmental media (i.e. air, water, land). This is to make sure that reducing the environmental impact at one stage in the life cycle does not increase the impact at other places in the cycle. Increasing awareness of the Life Cycle Analysis technique would allow companies as well as individuals to consider multiple options for a new product. Many businesses do not always consider their supply chains, or the "end-of-life" processes associated with their products. After consideration of all available options, life cycle thinking would encourage selection of the most sustainable option. Since the decisions of global businesses and government organisations have such a large impact on the environment, incorporating life cycle thinking into their actions could greatly reduce negative environmental effects and improve sustainability. Life cycle thinking blends two aspects: time span and real sources of impact. This is why it brings to choices that generate economic value over a long period, taking into account the natural environment and social aspects at the same time (BALKAU-SONNEMANN 2017). Looking at the bigger picture: businesses do not always consider their supply chains, or the 'use' and 'end-of-life' processes associated with their products. Government actions often focus on a specific country or region, and not on the impacts or benefits that can occur in other regions or that are attributable to their own levels of consumption. Taking a life cycle perspective requires a policy developer, environmental manager or product designer to look beyond their own knowledge and in-house data. It requires cooperation up and down the supply chain. At the same time, it also provides an opportunity to use the knowledge that has been gathered to gain significant economic advantages. In order to put in practice LCT, many different, qualitative and quantitative tools have been developed; the most significant tool for LCT is life cycle assessment (LCA).

Life Cycle Assessment in the context of materials

Life Cycle Assessment (HORNE et al. 2009) is a useful technique employed to quantify the environmental impact of products or processes during their entire life cycle. To make strategic (industrial, productive, political) choices, in fact, it is necessary to set up an objective standardised method for the assessment and quantification of energy loads and environmental impacts associated with a product/process/activity throughout the entire life cycle, i.e. *from the cradle to the tomb*. This evaluation method examines the processes in the entire product life cycle, including all stages of raw material extraction and processing, product manufacturing, transportation and sales, product use, reuse and maintenance, waste recycling and final waste disposal: for each stage, an inventory of the energy and material consumption and of any emissions to the environment is made. This technique allows to identify criticisms, i.e. components/processes where improvements can be made for the environment, and to compare alternative products/ processes in order to choose the one characterised by a lower environmental impact, or to make comparisons between conventional and innovative scenarios.

The ISO 14040 (ISO 14040) series standard defines an LCA procedure including four phases, i.e. the definition of the objective and field of application (the system and its "boundaries", these choices having a great relevance on the whole analysis); the inventory analysis, with a collection of inputs (materials, energy, natural resources) and outputs (emissions into air, water, soil) related to the system under analysis; the assessment of the impacts, assigning them a value and classifying them according to different environmental impact indicators (energy and resource consumption, greenhouse effects, toxicity, etc.); the interpretation and analysis of the results. The LCA analysis has an iterative character, since, through a careful analysis and interpretation of the results, it is possible to intervene in one of the phases to improve the reliability of results and/ or to modify the choices made in defining the objectives and boundaries of the system.

In the field of materials manufacturing and production, the results of LCA analysis are effectively used to support and guide the choices related to the design of materials and their transformation processes to minimise the overall environmental impact (HORNE et al. 2009). Furthermore, LCA may bring also economic advantages, since, starting from its results, it is possible to identify strategies for a reduction of the materials and/or the consumption of energy. The experience proposed in this course will illustrate how to apply LCA techniques for the identification of the best choice, in terms of type of material (polymeric, glass, ceramic, etc.), to manufacture objects of common use (for instance: cups, plates, food pans, etc.). The comparison of the overall environmental impacts involved in the use of the different materials for the same common application will allow to identify the best solution, i.e. the material offering the lowest environmental impact.

Environmental Impact Assessment: Sustainability of land use

The environmental question is increasingly central in society and in the world political debate (HELMING et al. 2008). One of the most important consequences is the United Nations 2030 Agenda for Sustainable Development, to which 193 countries have signed up; it clearly defines the requirements for the immediate future. Science has also been mobilised for some time, indeed it is the architect of these needs for change, for its action of knowledge and reporting of problems.

Now it is up to the technique which must know how to build practices, translating socio-political issues into concrete and practicable facts. The key is the analysis and understanding of the environmental effects of land use, their interaction, which is always specific. The impact is generated by the environmental and anthropogenic load characteristics that occur from time to time. The relativity of the operational concept of sustainability, which is the crucial concept, is clear.

Land use and its management and governance are essential. It is worth considering them because the sustainability objectives of the 2030 Agenda come from territorial assets. Environmental and landscape degradation arises from unsustainable land use. From this consideration it is necessary to start to solve the problems from the beginning, in the most efficient and economical way. The first step is knowledge. It is necessary to understand the problems of the physical environment (air, soil and water) by investigating their fundamental characteristics, in terms of intrinsic vulnerability factors, and compare them with the load generated by land use. This interaction determines the environmental impacts, the key to sustainability.

The problem is the interaction between the action and its context. Action is sustainable if the context is able to receive it without being irreversibly altered. This is the concept of "carrying capacity", conjugated by Rees and Wackernagel (2008) in their definition of ecological footprint, where human action is the "load" and intrinsic vulnerability is the carrying capacity of the system.

The two environmental economists (REES–WACKERNAGEL 2008) arrive at the calculation of the global footprint, estimating the only action because the resistant element is the entire earth system. To meet the UN 2030 Agenda, the concept of ecological footprint must be transferred to the environmental sector scale. The ecological footprint is determined not only by the "weight" (external load) but also by the resistance of the recipient (ecosystem). At the same weight, the footprints can be very different depending on the specific characteristics of the environment on which they are imprinted.

Corporate Social Sustainability

In the last few years, many companies (Energy, Utilities and Mining, Financial Services, Industrial Products, Retail and Consumer, Technology, Media and Telecom, Transport and Logistics) started to integrate sustainable and ethical principles in their business models (PwC 2018). The increasing attention paid by companies to these practices was driven by several factors such as stakeholder pressures, mimetic isomorphism, and regulation (GATTI et al. 2019). In this sense, the scientific debate on Corporate Social Responsibility (CSR) has been characterised by evolutionary pathways related to the new trends (CARROLL 2021. This paradigm shift was supported by the contribution provided by the Multinational Enterprises (MNEs), which represent companies traditionally interested to engage with stakeholders (PIZZI et al. 2020; TOPPLE et al. 2017).

Evaluating the contribution provided by companies to sustainable development represents a complex task for academics and practitioners (BEBBINGTON–UNERMAN 2020; JENNINGS–HOFFMAN 2019). In fact, despite the existence of direct and indirect impacts related to the anthropic activities conducted by companies, the evaluation of their contribution is limited by the lack of transparency about their ESG performance (Environmental, Social, Governance) (BEBBINGTON et al. 2020). This criticism is more relevant for the Small and Medium Enterprises due to their opacity (PERRINI et al. 2007). Indeed, despite the fact that an increasing number of large companies and MNEs started to adopt non-financial reports on voluntary or mandatory basis (JACKSON et al. 2020; KPMG 2020), only a few numbers of SMEs disclosed their non-financial information (European Commission 2020b).

Building on preliminary evidence, below we assess the potential contribution provided by SMEs to sustainable development through an assessment of their "material" topics. The materiality matrix published by the SMEs listed in the official Global Reporting Initiative is analysed to identify the main strengths and opportunities related to the disclosure of non-financial information. The insights support the conceptualisation of a theoretical framework useful for academics, practitioners and policy makers. Furthermore, the students can develop new knowledge about innovative reporting tools such as sustainability reports, integrated reports and combined reports.

The sustainable development of lakes: The management of the Lake Chad Basin as an example of peace and stability

Lake Chad in the Sahel region is an oasis that includes regions from Chad, Cameroon, Niger and Nigeria. The lake's water originates from the Central African Republic, Nigeria and Cameroon. Compared to its 1960s size, when it was at its highest level, the lake has shrunk 90 percent (OKPARA et al. 2015). The size of the lake is constantly changing following the weather conditions, rainfall and irrigation practices (ZHU et al. 2019; VIVEKANANDA et al. 2019). This development causes increased instability and uncertainty for those people who depend on the lake's resources. Further, violence, conflict and unstable governance have contributed to humanitarian crises. Of approximately 17.4 million people living in the conflict areas of Lake Chad, almost ten million need humanitarian assistance (USAID 2019).

In many countries and regions, water and land scarcity, food insecurity and migration are having a devastating impact (IPCC 2018; 2021). These aspects make populations more vulnerable to climate change and more prone to recruitment into violent groups and militias, either for economic reasons or as a response to anger and political dissatisfaction (CHARALAMPOPOULOS 2020). Climate change is not a direct consequence of violence and political conflict but can create contexts conducive to their occurrence (NETT–RÜTTINGER 2016). Moreover, the scarcer the resources, the greater the power held by those who control them, who can use this power as a weapon of war and political pressure (NETT–RÜTTINGER 2016).

In 2009, Boko Haram started to have a significant presence in the region. It was the time when the group was understood as a security problem for the region. As a response to the threat, the "Lake Chad Basin Commission", which is responsible for the rational management of the lake, with the support of the African Union, decided in 2012 to broaden the mandate of the Multi-National Joint Task Force to fight Boko Haram. This reaction constituted a multinational formation with a regional, not a single-state, mandate (CONING–KRAMPE 2020). Over the time, it was more understood by the states of Lake

Chad, the African Union and other partners, such as the European Union and the United Nations, that the difficulties concerning the environmental and social construction of the region needed a wide-ranging strategy linking economic, social, environmental and other security issues.

Cooperation was the most important element for the success of the initiative. This cooperation included all the levels of political and social organisations. It combined the engagement of local communities and civil society, of the local governments via the "Governor's Forum", of the Lake Chad Basin regional states, of the African Union, of the United Nations and of other international partners.

The spirit of these initiatives, for the protection and development of the Lake Chad Basin, constitutes an example of how mechanisms can be developed to coordinate local regional and international frameworks. This strategy constitutes an example of a multidimensional approach recognising the whole spectrum of difficulties that are necessary to be solved to promote peace and stability in a new era where security among people, security among states and stability of the environment play a crucial role.

Linguistic sustainability and linguistic resilience

The concept of 'Sustainability' can also be applied to linguistic reality by referring to the struggle for the preservation of linguistic diversity and the maintenance of the identities of the minority communities (BASTARDAS-BOADA 2004). The increase in contact among people and languages, the reduction of the traditional isolation that favoured the linguistic diversity in specific areas, the expansion of the dominant languages are processes that have affected the maintenance and development of the cultural and linguistic diversity. The aim of linguistic sustainability is therefore to struggle the "glottophagic" expansion of the dominant languages and to recognise the equal dignity and value of all linguistic groups. Linguistic Resilience blends ecolinguistics and ecological resilience thinking: it seeks to understand and investigate the many factors underlying choices concerning language use. Unlike ecolinguistics, but like resilience thinking, it also seeks to restore equilibrium and promote the reclamation of languages (BRADLEY 2010).

Many languages, mainly minority ones, face the risk of extinction. The reasons are various, such as globalisation, uniformisation, etc. Along with the language, the ancient customs and traditional knowledge are also endangered. For this reason, special policies should be considered that help preserve this heritage, such as: finding financial resources to document these languages, documenting and distributing traditional oral literature or other traditional knowledge, textbook materials, etc. In this way, many endangered language communities could face language globalisation, which remains a constant threat, especially to minority languages. A resilience approach may help a community to move towards a reorganisation phase which does not lead to the disappearance of the language, or to avoid the release phase altogether, maintaining their traditional language and culture alongside dominant languages within larger political entities.

Linguistic landscape

Language surrounds us in forms of texts, signs and symbols. The visual and material representation of languages in the public, the so-called "linguistic landscape" (LL), has become an object of interesting linguistic and sociological studies during the last two decades. Jan Blommaert (2016) claims that linguistic landscapes mirror the language situation of a certain area, involving questions of multilingualism, dominance of languages and language policies. The signs convey not only linguistic but sociocultural meanings, which connect a sign to a particular sociocultural context and history. The deeper layers of meaning can explain the public (or "top-down") and private (or "bottom-up") signs, which reflect the diversity of languages, and the power relations between speakers of minority and majority languages. Official signs reinforce existing power relations, while non-official signs index the presence of minority languages and may lead to linguistic resilience. The linguistic signs of a city or school lead us to cityscapes and schoolscapes, while commercial signs can build up the servicescape of businesses. New trends study the smellscape, soundscape or the publicly accessible online worlds as part of the LL.



Figure 1: Hungarian and English texts displayed in a Hungarian-language school in Romania Source: Authors' photograph

Some examples may be useful for explaining how LL can be analysed in their contexts. The German–Italian signage in the Italian province South Tyrol (Bolzano/Bozen) with a mostly German-speaking population can be interpreted as a reference both to the local, strictly bilingual language policy and to the "German" identity of the inhabitants and their linguistic vitality (DAL NEGRO 2009). As for endangered minority languages, the presence in public written texts may increase their prestige and may be helpful for creating a local self-identity of the speakers (GORTER et al. 2012). This could be the case of Albanian (Arberesh) in Southern Italy, which is spoken in numerous smaller villages in Apulia, Calabria and Sicily where it has become a part of the cultural heritage, together with religious traditions and folklore.



Figure 2: German–Italian signs in South Tyrol Source: Authors' photograph



Figure 3: An Italian–Albanian–English sign in Southern Italy Source: Authors' photograph



Figure 4: A bilingual (Romanian–Hungarian) sign at a vaccination centre in a mostly Hungarian-speaking county in Romania Source: Authors' photograph

Conclusions

People and the planet are at the heart of the 2030 Agenda goals. The Sustainable Development Goals emphasise the need for a change of course in individual and collective behaviour. The UN report *Global Resources Outlook 2019* (IRP 2019), written by the International Resource Panel, highlights that increased material extraction is the main culprit for climate change and stress on biodiversity.

In line with the goals of the 2030 Agenda, the European Union with its *European Green Deal* action plan aims to promote the efficient use of resources, exploiting the circular economy system to reduce pollution and restore biodiversity. The goal of the *European Green Deal* is to transform the EU into a modern, resource-efficient and competitive economy.

The *Global Resources Outlook 2019* shows that the efficient use of resources is crucial but not sufficient. The need is to move from linear to circular flow: extended life cycles, smart product design, reuse and recycling. A rational use of resources and consumption, and sustainable production are key factors.

We need to look to the future by harmonising economic growth, social inclusion and environmental protection. It is a great challenge that no one can escape because an irreversible environmental disaster is still avoidable.

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