Sustainable Development will not Avoid a "Ghastly Future"

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Abstract

If we do not manage to turn the wheel and live and do business differently, we will face difficult times. Change must be based on an altered higher education. Why? One might well ask—after all, most present study programs at universities are geared towards the idea of 'sustainable development.' The problem is that this concept is strongly focused on the well-being of the economic system. This is readily evident from the fact that in the three-pillar model, which is often used as a conceptual basis, the dimension of culture is missing. This should have a foremost position, however, if we hope to become genuinely environmentally sustainable through a radical change in consciousness. Such a shift must be initiated through a change in higher education that leads us, as explained in my second article, to human ecological notions of a meaningful, reasonable and compassionate human existence on this planet.

Key words: ecodevelopment, higher education, radical change, sustainable development, three-pillar model

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Introduction

The danger of a "ghastly future"

The writing is on the wall. Scientific circles and environmental organizations are uttering ever more urgent warnings that our current path of development brings us to the brink if we do not change our societal activities fundamentally. For example, three years ago a group of 17 scientists issued a call entitled "Underestimating the Challenges of Avoiding a Ghastly Future" (Bradshaw et al., 2021). In it we are confronted, in summary, with the main aspects of the environmental crisis, but also with the lethargy with which it is still predominantly met. Beside climate change and biodiversity loss, the gradual poisoning of the planet is mentioned, as well as the accumulating plastic waste as a threat not only to the well-being of ecosystems but also to human health. The emergence of areas with ruined livelihoods will trigger mass migrations and lead to conflicts that will weaken international cooperation or even end in wars. The authors do not shy away from mentioning the often tabooed disaster of continuing population growth—after all, this is the original causative factor number one with regard to the emergence of environmental problems. Bradshaw et al. (2021) write:

> Future environmental conditions will be far more dangerous than currently believed. The scale of the threats to the biosphere and all its lifeforms—including humanity—is in fact so great that it is difficult to grasp for even well-informed experts. (p. 1)

At the same time, the degradation of the environment does not necessarily proceed little by little. The danger is that, especially in the context of climate change, sudden alterations of state can occur when certain limits are transgressed at tipping points. A recent study by Armstrong McKay et al. (2022) cites as candidates: an abrupt collapse of the Greenland and some of the Antarctica ice sheets, of the Gulf Stream, of the Amazon rainforest, and of the permafrost.

Necessary radical change and the importance of education

What is the solution to this threatening situation?

> The gravity of the situation requires fundamental changes to global capitalism, education, and equality, which include *inter alia* the abolition of perpetual economic growth, properly pricing externalities, a rapid exit from fossil-fuel use, strict regulation of markets and property acquisition, reigning [*sic*] in corporate lobbying, and the empowerment of women. (Bradshaw et al., 2021, p. 6)

Following the term used by the Austrian economic historian Karl Polanyi in describing the emergence of capitalist industrial society (Polanyi, 1944/2001), there is widespread talk of the need for a "Great Transformation" (see, e.g., WBGU[2], 2011). Others propagate a "Great Transition" (e.g., Raskin, 2016). One would expect, then, that policymakers would have long since attempted to counter the threats to existence with far-reaching, substantial measures. But this is not the case; the dominant opinion is that the sacrifices and costs involved are politically unacceptable. Above all, the profit-oriented economic system, which is mainly to blame for the existing misery, is fighting tooth and nail against structural changes that call into question the principle of using money to make more of it.

But when politics turns out to be impotent, our interest inevitably jumps to the realm of higher education, assuming that it should be able to produce 'agents of change' who can act with the necessary corrective state of mind on the problematic areas of our civilization, such as said politics, but also economics. The problem here, of course, is that the same politics that needs to be critically examined is called upon to support the educational system. If the necessary openness is lacking, we will have to rely on private initiatives. But then claims will be heard from everywhere that educational reforms have already been instigated—in that, at most universities, the topic of sustainable development has become part and parcel of most disciplines and in some cases the essence of entire study programs.

There is no doubt that the preservation of livelihood on this planet depends on a state of sustainability, if this is understood to mean that humanity acts in a way that is ecologically sound and fit for the future. Unfortunately, today's educational system is not capable of guaranteeing a successful path to this goal. The inadequacy has to do with the fact that the commonly used concept of sustainable development is still largely a prisoner of the current civilizational order with its problems. The prevailing idea is that we do not have to fundamentally question this order, that it is sufficient to scrutinize the ecological consequences of our actions and, if necessary, eliminate or at least reduce them through technical measures. Ultimately, this means 'business as usual,' now simply sustainable! And because the economy continues to be driven by the profit motive, cheating in the advertising of sustainability is always at hand: A survey of commercial websites conducted by the European Commission together with National Consumer Authorities gave "reason to believe that in 42 % of cases the claims were exaggerated, false or deceptive and could potentially qualify as unfair commercial practices under EU rules" (European Commission, 2021, para. 1).

Of course, this statement is not intended to lump together all activities in sustainable development as not achieving their goals. A distinction must be made between the

2 Wissenschaftlicher Beirat der Bundesregierung Globale Umweltveränderungen (German Advisory Council on Global Change).

shortcomings of the concept of sustainability and its various rampant interpretations, and committed individuals who, with ecological sincerity, try to make the best of it. But if we want to avoid falling into the trap of a false solution, we need a much broader conceptual basis from which to think about future viability. In this sense, I will plead for a human ecological understanding of the situation as the basis for an educational program in my second article in this issue.[3]

Environmental education and ecodevelopment

Environmental education

It is important to remember that before today's hype with sustainable development, there was a period in the 1970s and 1980s when 'environmental education' was the slogan of the day. People were more aware then than they are today that the environment should be protected not only because it provides resources for humans, but also for its own sake. This understanding produced a tendency to ecocentric thinking. It was also the time when environmental ethics emerged as a new subdiscipline in philosophy, questioning our anthropocentric relation to nature (Kopnina, 2011, p. 5).

The conviction that environmental education should be the order of the day developed in the 1960s. It gained international attention and importance with the 1972 United Nations (UN) Conference in Stockholm. In 1975 at a 10-day workshop in Belgrade organized by UNESCO[4] an analysis of the environmental situation led to the conviction that global efforts in the field of environmental education were called for. In a final document, the "Belgrade Charter," objectives were formulated (UNESCO, 1975). An urgent need for a new global ethic was mentioned, and with regards to environmental education it said:

> The goal of environmental education is: To develop a world population that is aware of, and concerned about, the environment and its associated problems, and which has the knowledge, skills, attitudes, motivations and commitment to work individually and collectively toward solutions of current problems and the prevention of new ones. (UNESCO, 1975, p. 3)

At the same time, further economic growth was still regarded as indispensable, but it should, so it said, no longer result in harmful social and environmental consequences as in the past. Accordingly, one of the guiding principles given at the end of the

3 See this special issue: "An Evolutionary Human Ecological Framework for Higher Education."

4 The United Nations Educational, Scientific and Cultural Organization.

document was: "Environmental education should examine all development and growth from an environmental perspective" (p. 4). It called for the development of both formal and informal education programs for the general public. As a result, the idea was able to gain a foothold to some degree at the primary and secondary school levels, while universities took less notice. The most successful programs may have been those designed for youth and adults by NGOs such as the World Wildlife Fund (WWF).

In retrospect, one might think that the idea of environmental education was simply a precursor to today's improved concept of education for sustainable development (ESD). But this is not the case. If anything, this change must be seen as a step backward. English environmental anthropologist Helen Kopnina (2011) writes in one of her papers:

> The theory propounded in this article is that ESD has moved away from the former ecocentric emphasis of environmental education to focus on the social and, especially, the economic aspects of sustainable development. (p. 3)

And:

> Discourse on sustainable development, and by extension ESD, tends to underestimate both social and environmental costs of development as well as mask its neo-colonial tendencies to assign superior value to the (mostly Western) idea of economic growth as the greatest good. (p. 5)

This is a preview to the criticism of the concept of sustainable development expressed further below.

Ecodevelopment

At the same time, the integrative practice-oriented concept of ecodevelopment also emerged. How did it come about? The UN's plan to foreground the environmental issue for the first time at the 1972 World Conference in Stockholm met with opposition from a number of developing countries. They believed the analysis put forward by many economists that poverty in the countries of the global South was responsible for the existence of environmental problems. So economic development was the order of the day, but this, it was feared, would be hampered if environmental regulations were imposed. However, Maurice Strong, the Canadian businessman appointed as secretary-general for the conference, managed to persuade the skeptical developing countries to cooperate. At the conference, Strong then tried to postulate

the possibility of a fruitful coexistence between environmental protection and development with a concept of 'ecodevelopment.' His approach was later fleshed out by various parties and tested in practical applications.

The German social scientist and human ecologist Bernhard Glaeser saw "ecodevelopment as an implementation of human ecology" and said: "By ecodevelopment we mean an alternative policy of economic development that takes care of environmental limits and that is ecologically sound" (Glaeser, 1984a, p. 1).

And he suggested that consideration of the social relations prevailing in the study area should always be included. The concept was based on three elements:

1. Basic human needs: The local population must be able to have its say in the matter. The satisfaction of needs should not be coupled to a growth in GDP, but should be based on the consideration of local conditions. Deficiencies that cannot be remedied must be compensated for by inputs from outside.
2. Self-reliance: Local communities must be able to identify problems on their own and to decide autonomously how to solve them. In other words, they should not be dependent on the planning of a distant authority, but rather it should be possible for them to draw on the resources directly available to them, including local experience.
3. Environmental compatibility: The resource use in question must be ecologically sound to an extent that it can continue the same way in the long term. Environmental protection is the ecological basis for economic development.

The Polish-French socioecologically oriented economist Ignacy Sachs (1977) talked about harmony with nature:

> "In harmony with nature" means that we try to find sustainable uses for resources, so as to take into consideration not only our immediate interests, but also our long-term interests; not only our synchronic solidarity with the poor (the poor who are with us now) but also a diachronic solidarity (with future generations). (p. 339)

The idea of ecodevelopment has been applied primarily in rural areas of developing countries. The work of Glaeser (1984b) in Tanzania provides an example. Sachs (1986), however, has shown that the concept is also applicable to urban situations.

It is also true of ecodevelopment that it was not simply a precursor to sustainable development, but that with its disappearance, mainstream thinking has suffered a loss. The old idea was that the ecological foundations present in an area should

determine the possibilities for economic development, whereas the new idea contains, explicitly or covertly, the reverse postulate that economic growth is a prerequisite for the possibility of ecological consideration.

Sustainable development

What does it mean?

Sustainable development is to be understood as a process that should lead to *sustainability* as a state. The now classic model for this is sustainable forestry, in which no more timber is harvested in a year than will grow back again. However, this principle can only be applied to the use of renewable resources. The Swiss economist Jürg Minsch (1993) has listed criteria which should be applied in other situations. For nonrenewable resources, the requirement must be to minimize consumption, which can be realized either through sufficiency, through organizationally or technically increased efficiency, or through a combination of both criteria. Under certain circumstances, a nonrenewable resource may be substitutable by a renewable one. Furthermore, whatever we do, emissions (waste, pesticides, carbon dioxide, etc.) must not exceed the absorption capacity of ecosystems. And finally, major ecological risks must be avoided. It is clear that all these conditions are hardly fulfilled anywhere on a large scale today. Yet catastrophes triggered by high-risk technologies have long since acquired the status of normality (see Perrow, 1984).

Development in the most general sense simply means moving forward in a process. In the concept of 'sustainable development,' however, the term has a special economic meaning, namely that of further growth. But this not only torpedoes the reduction of human impact on the ecology of the natural environment demanded by sustainability, but turns it into its opposite. There is thus a fundamental contradiction between the concepts of 'sustainability' and 'development.' This outcome is a consequence of the answer to the question of how the inequality between poor and rich countries can be remedied by development: In the poor countries, economic performance must simply be intensified along Western lines, which will increase access to resources and thus ensure increased material prosperity, but also improve the social situation.

But this is only possible if rich countries drastically reduce their consumption. The data published by the Global Footprint Network on the available biocapacity and the ecological footprint document the magnitude of the problem: For 2018, the existing biocapacity was on average 1.58 gha per capita globally, while the ecological footprint of a country like the USA amounted to 8.12 gha per capita.[5] The American demand thus exceeds the average available supply by a factor of more than five.

5 The abbreviation gha stands for 'global hectare.' A global hectare is a biologically productive hectare with world average biological productivity for a given year.

For many developing countries (especially those in sub-Saharan Africa), a further inhibiting factor for a more equitable distribution is still the rapid population growth.

Critique: Vagueness, growth addiction, instrumentality

In preparation for the Earth Summit on Environment and Development planned for 1992 in Rio de Janeiro, the UN set up the World Commission on Environment and Development (WCED). It operated under the chairmanship of Norwegian Prime Minister Gro Harlem Brundtland and published the report *Our Common Future* (often simply called the "Brundtland Report") in 1987. The definition given there is repeatedly cited as fundamental to the current understanding of sustainable development: "Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (WCED, 1987, p. 43). The attempt to address the problem of intergenerational equity is sympathetic, but the abstractness of the definition leaves it hanging in the air. What needs are meant? Only the basic material needs that directly secure life, or luxury needs beyond that? And what about non-material needs, such as an aesthetically satisfying environment? Do we know the needs of our descendants? These questions can only be discussed with reference to the ecological basis that allows the satisfaction of needs in the first place, a basis that must be preserved. This should also include the question on the needs of our fellow creatures. Without it, the concept is purely anthropocentric.

Subsequently, the vagueness of the concept and the associated plethora of different attempts at defining it—the English environmental policy expert Andrew Dobson (1996, p. 402) mentions a number of about 300—have been complained about again and again. The ambiguity, however, has the 'advantage' that many different interested parties can see a common denominator in it. Dobson (1996, p. 401) refers to this circumstance by quoting a saying of his Indian colleague Sharachchandra M. Lélé (1991):

> Sustainable development is a 'metafix' that will unite everybody from the profit-minded industrialist and risk-minimizing subsistence farmer to the equity-seeking social worker, the pollution-concerned or wildlife-loving first-worlder, the growth-maximizing policy maker, the goal-oriented bureaucrat, and therefore, the vote-counting politician. (p. 613)

One point of contention is the growth ideology already mentioned. It was already present in the Brundtland Report: "What is needed now is a new era of economic growth—growth that is forceful and at the same time socially and environmentally sustainable" (WCED, 1987, p. xii). The same 'mission impossible' is also invoked in the report of the Business Council of Sustainable Development, which was

also constituted with a view to the 1992 UN conference and was headed by the Swiss entrepreneur Stephan Schmidheiny. In an introductory declaration, it states: “Business will play a vital role in the future health of this planet. As business leaders, we are committed to sustainable development” (Schmidheiny, 1992, p. xi). Fine words, but what has become of them? A complete success as far as economic growth is concerned, but the proclaimed change of course never happened. On the contrary, economic activity seems to have become even more ecologically and socially ruthless since then.

With the definition of categories and detailed quantitative targets, as with the UN’s Sustainable Development Goals (SDGs), ambiguities are eliminated on a point-by-point basis. But of course, the points themselves can be critically scrutinized. First and foremost, Goal 8: “Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all” with sub-goal 8.1: “Sustain per capita economic growth in accordance with national circumstances and, in particular, at least 7 per cent gross domestic product growth per annum in the least developed countries.” Modestly, growth will be possible here and there without further environmental degradation, but of course the goal, when worded in such general and unqualified terms, completely undermines the idea of sustainability. Regarding Goal 1, “No Poverty,” one may wonder if excessive wealth should not also be eradicated. Oxfam, the global NGO engaged in development and disaster relief, has made precisely this demand to the UN, but is not being listened to (Rudzio, 2018). One must realize that by now just 1% of the world population has as much wealth as all the rest (Endres, 2016).

And one can question the very concept of quantitative goal setting. This is done, for example, by the Australian-Swiss social scientist Roderick Lawrence (2020, p. 95). He criticizes the assumption underlying the UN goals, that a direct link between means (resources) and desirable sustainability goals corresponds to instrumental-rationalist and linear-causal thinking that leaves out intervening variables such as human intentions, motives, preferences and fundamental values. This is fatal because these not only influence individual and collective behavior, but affect the condition of societal institutions and structures. Lawrence (2020, p. 109) therefore argues for the design of a new ecosocial contract based on ethical principles and moral values, with the capacity to replace self-centered human behavior and short-term institutional and political action with collective ecocentric visions of a shared future. Without such clarifications, an interpretation of ‘sustainable development’ that goes beyond its rational-quantitative content remains subject to broad arbitrariness.

Swiss economic ethicist Peter Ulrich (2012) argues similarly, but from a philosophical perspective. He sees in the formulation of goals a thinking in teleological categories, a thinking that corresponds to the conventional economic approach. And he describes the necessary correction in this way:

> Beyond this mindset the categories that should move into the focus of attention are those of *rights and duties*. Expressed in the terminology of ethics, deontological categories are required which address interpersonal (and intergovernmental) commitments. (para. 5; translation by author)

Critique: The three-pillar model

When selecting indicators of sustainable development, people often refer to the dimensions of the so-called three-pillar model (sometimes also called the “magic triangle”): ecological, social, and economic. The UN’s SDGs are not explicitly organized accordingly, but the organization has committed itself to this in an earlier publication (UN, 2012, p. 19): It will “promote the balanced integration of the three dimensions of sustainable development.” This concept cannot be spared criticism either (see also Steiner, 2003).

Where this concept originated is not clear. It is interesting, but little known, that the American sociologist Walter Firey designed a corresponding concept for questions of resource use as early as 1960, working with the three dimensions ecological, ethnological (cultural), and economic. The quantitatively formulated goals to be achieved in those domains are intended to ensure ecological responsibility (for a continued existence of livelihood), social solidarity, and economic performance. For ecology, this requires adherence to the principles of sustainability, such as those formulated by Minsch (1993). Social solidarity should represent all-round justice, especially in the sense of empowering all for equal access to resources, eliminating the enormous disparities between rich and poor, and guaranteeing equal rights for both sexes. In both areas, ecology and society, however, substantial improvements have so far remained largely wishful thinking. The situation is different in the economy, where further growth is a sustainability goal. In order to become truly sustainable, however, the economy would have to move toward a state of affairs such as that described as “Buddhist Economics” by German-British economist Ernst Friedrich Schumacher in Chapter 4 of his book Small is Beautiful (1973). In the Buddhist view, property and consumption is a means to an end, namely to ensure human well-being, and the more the invested effort can be minimized, the better. In today’s terminology, this is called sufficiency. For the modern Western economy, on the other hand, using the means of labor, land, and capital, the goal is to maximize property and consumption. Implicit in this is the idea that a person’s well-being increases the higher their wealth, but this is, as we know by now, a fallacy.

Linked to the three-pillar model is the proposition that all three dimensions should be given equal weight. However, if we really want to secure the conditions for a continuation of life, ecology should have absolute priority. This does not mean that humans should not be allowed to make any changes to the (existing) natural basis.

They should simply avoid its further degradation or, better, improve its quality. In the past, this has happened, despite all the environmental destruction that has accompanied human history at least since the beginning of political societies. One example is the extensive medieval forest clearing in Central Europe, which led to diversified agricultural landscapes with increased biodiversity.

But back to the supposed equivalence of the three areas: It is hardly ever observed, if only because conflicts of objectives between the three dimensions cannot be avoided. When the economy is affected, the decision is often made in its favor. According to the German philosopher Klaus Michael Meyer-Abich (2003), a closer look reveals that the economic sector is automatically favored anyway, even if not consciously. He writes:

> The error of the three-column theorem consists ... in giving equal weight to (1) the whole of nature, (2) a part of this whole, namely human societies, and (3) a part of this part, namely their economies, for the weighing of interests. Instead, a subordination of the part under their whole would be appropriate! For if the whole is not given more weight than the part, and both not more than the part of the part, the latter—i.e., the economy—is the decisive 'third.' (pp. 179–180; translation by author)

Another worrying shortcoming is the absence of a cultural category. As we will see in my other article in this issue, on "An Evolutionary Human Ecological Framework," a human society is fundamentally structured by the three dimensions naturally given by human existence: cultural, social, or better; sociopolitical; and economic. Culture here is understood in the narrow sense as the state of mind of a human society, which includes religion, philosophy, and science as systems of interpretation; art as a system of expression; and education as a system of transmission. With all these elements missing from the reckoning, the fundamental orientation is missing, which should take nature[6] as its starting-point and as the primary determinant of the human worldview, ultimately shaping human activity. If education occurs at all in indicator systems, it is assigned to the area of the social and thus hangs in the air. Let us take the Swiss system MONET (Monitoring of Sustainable Development) as an example. Its latest version at time of writing (Federal Statistical Office, n.d.) is structured after the 17 SDGs contained in Agenda 2030 of the United Nations (UN, 2015). The indicators dealing with education are the following: literacy of 15-year-olds; proportion of women in the faculties at the tertiary education level; proportion of young adults who obtain a qualification at the secondary level; proportion of adults taking part in informal continuing education; and proportion of the population with extended digital skills. In the UN's 2030 Agenda (2015), education appears

6 See the article "Harmonize with Nature" by Ulrich Loening in this issue.

as the fourth SDG. All children and young people should have access to education, and in doing so, all should acquire the skills of reading, writing, and arithmetic (literacy and numeracy). Fine, but what should the educational content be? Subgoal 4.7 states: “By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development.” That’s the cat biting its tail.

I addressed the problem of the lack of culture in an essay on sustainable development 22 years ago (Steiner, 2003, pp. 59–60). Unknown to me then, the German science educator Ulrich Jüdes had already criticized the absence of culture as a connecting link in the concept of sustainable development in the later 1990s. He wrote:

> Surprisingly, the cultural aspect is hardly considered in the SD discussion: The importance of different human cultures as expressions of specific adaptations and development paths, and thus as starting points for divergent development options, is neglected. (Jüdes, 1997, p. 28)

And:

> Both in the ethical and in the coevolutionary approach to the human–nature relation, culture has a mediating function between humans and nature, which does not make its subsumption under the social dimensions of human–human relations appear meaningful. (p. 28; translation by author)

What the cultural dimension entails for Jüdes can be found in an article by the German economist and sustainability researcher Gerd Michelsen (2002). Referring to a paper Jüdes wrote in 1996 (Jüdes, 1996, as cited in Michelsen, 2002, p. 196), he writes: “worldview; holistic perception of nature; rationality; religion/myth; rhythm of time; identity; cultural diversity, among others” (translation by author). Michelsen himself formulates the importance of cultural anchoring thus:

> Appropriately promoted cultural traditions and developments can contribute to a reorientation of human needs and ways of life and to a changed human–environment relationship that is more strongly characterized by empathy. (Michelsen, 2002, p. 197; translation by author)

Later, Dirk Marx and Arne Schöler (2010, p. 3) pleaded for the introduction of culture as a foundation for the three aforementioned pillars. More precisely they talked about a cultural–institutional dimension that would contain the forces for processual cooperation and the establishment of a balance between all interest groups and actors.

This notion reminds us that we need a political system capable of governing sustainable development. One may be surprised that this is not also on the list of aspects of human civilization to be examined. After all, it is the institution that defines the sustainability goals in the first place and then examines the degree to which the goals are being achieved by means of monitoring. But it is also the institution that has the power to promote or impede progress in this domain. It should therefore be possible to assess the respective quality of a political system from a meta-level. Some thoughts in this regard can be found in my essay mentioned earlier (Steiner, 2003, pp. 60–61). We will not go further into this here.

Failure

The UN Conference on Environment and Development (UNCED) held 1992 in Rio de Janeiro, with its aim to reconcile the worldwide economic development with the protection of the environment, raised great hopes for basic changes in human activities leading to a better protection of the environment. In terms of documents it was very productive. The so-called "Rio Declaration" contained 27 broad nonbinding principles for environmentally sound development. "Agenda 21" was intended as a collection of guidelines for the introduction of sustainable development measures by national governments, "Local Agenda 21" with respective recommendations for an implementation at the communal level. The "Convention on Climate Change" had the form of a binding treaty requiring nations to reduce their greenhouse gas emissions. Likewise the "Convention on Biological Diversity" was a binding treaty requiring governments to take inventory of animals and plants and to protect endangered species. Finally the "Statement of Principles on Forests" was a nonbinding agreement encouraging nations to monitor their forest resources and limit the damage done to them (Editors of Encyclopaedia Britannica, 2022).

Meanwhile, the hopes associated with the conference have long since faded. Just five years after Rio the biologist Sascha Müller-Kraenner and the political scientist Barbara Unmüßig (1997) wrote:

> The world is not much closer to its goal of an ecosocial turnaround. The processes that have been initiated are moving at a snail's pace or are stuck in a dead end due to numerous diverging interests. … The main trends in global environmental problems—climate change, large-scale vegetation destruction such as deforestation, soil erosion, loss of biodiversity, and water scarcity and pollution—continue unabated. (p. 20; translation by author)

The follow-up conferences, "Rio+10" in Johannesburg 2002 and "Rio+20" again in Rio de Janeiro 2012, have not been able to provide any rays of hope either. With regard to the latter, Peter Ulrich (2012) says:

> The almost 50-page official final declaration, "The Future We Want," generally lacks binding force. Probably unintended, the title of the final document clearly states that it is largely only a wish list that almost everyone can agree to, since hardly anyone is concretely held accountable. (p. 2; translation by author)

The "Agenda 2030" (see UN, 2015) adopted by Rio+20 also appears to be a failure. Within this framework, 17 SDGs have been defined, which are to be achieved by 2030. The concrete instruments developed for this purpose consist of 169 targets, the degree of achievement of which is monitored using 248 indicators (as of 2023). In 2019, an independent group of scientists appointed by UN Secretary-General António Guterrez prepared a Global Sustainable Development Report, which states:

> Despite the initial efforts, the world is not on track for achieving most of the 169 targets that comprise the Goals. The limited success in progress towards the Goals raises strong concerns and sounds the alarm for the international community. ... Adding to the concern is the fact that recent trends along several dimensions with cross-cutting impacts across the entire 2030 Agenda are not even moving in the right direction. (Independent Group of Scientists appointed by the Secretary-General, 2019, p. xx)

The report mentions as major problems increasing inequalities, climate change, species extinction, and insufficient waste recycling. Even the UN itself has to admit a predictable lack of goal achievement. In the *Sustainable Development Goals Report 2022*, Guterrez writes, "As the world faces cascading and interlinked global crises and conflicts, the aspirations set out in the 2030 Agenda for Sustainable Development are in jeopardy" (UN, 2022). The situation is exacerbated by the destructive effects of the recent COVID-19 pandemic and the current war in Ukraine.

Conclusion

Thirty years of sustainable development have not led to substantial improvements in the way we treat the natural environment. The hope placed in higher education has not been fulfilled despite the support of the UN with its Decade of Education for Sustainable Development (2005–2014). In this situation it is time to think about alternatives, and from this arises my plea in my second article in this special issue to start with a foundation of elementary human ecological structures. Hopefully it is better suited to help to bring about a change of consciousness toward a more empathetic and respectful relation to our fellow beings, human and nonhuman.

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