

University of Heidelberg

Department of Economics



Discussion Paper Series | No. 527

Endangering the natural basis of life is unjust.
On the status and future of the sustainability discourse

Christian Becker, Dieter Ewringmann, Malte Faber,
Thomas Petersen, Angelika Zahrnt

June 2012

Endangering the natural basis of life is unjust

On the status and future of the sustainability discourse

Christian Becker^a, Dieter Ewringmann^b, Malte Faber^c, Thomas Petersen^d, Angelika Zahrt^e ¹

^aDepartment of Philosophy, The Pennsylvania State University, USA

^bSenior research consultant at the FiFo Institute for Public Economics, University of Cologne, Germany

^cDepartment of Economics, University of Heidelberg, Germany

^dDepartment of Philosophy, University of Heidelberg, Germany

^eHonorary Chair of Friends of the Earth (Germany), Member of the German Council on Sustainable Development, Fellow at the Institute for Ecological Economy Research, Berlin Germany

Abstract

The paper critically examines the status of the sustainability discourse and sustainability politics against the backdrop of considerations about the meaning of justice in the context of sustainability. We argue that the preservation of the natural basis of life is by itself a requirement of justice. However, the crucial role of the ecological dimension of sustainability has been neglected due to a problematic interpretation of the economic dimension, a limited understanding of justice, and an overemphasis of economic growth and growth politics. We propose to reposition the sustainability discourse and sustainability politics by prioritizing the long-term protection of the natural basis of life as the essential foundation of future development, welfare, and justice.

JEL Classification

I31, O40, Q01, Q5, Q57, A10, A13

Keywords

Sustainability, justice, ethics, growth, welfare, ecological economy

1. Introduction

Sustainability has become a common concept and there is widespread agreement that we should not live today at the expense of future generations. With this, the concept of sustainability serves for the justification of policy agendas such as balanced budgets or economic growth (see e.g. NEC 2009; EC 2010). However, the preservation of the natural basis of life does not receive sufficient attention in current political and public discussions.

In current discussions about sustainability, the *three-pillar model* (triple bottom-line model) plays a major role (UN 2002; Kates et al. 2005). According to this model, sustainability has three main “pillars” or components: ecological, social-political, and economic. Although this model is not without controversy, it combines the three central aspects of sustainability: the preservation of the natural basis of life, justice, and economic utility and efficiency. However,

¹ Corresponding author: Christian Becker, Dept. of Philosophy, 240 Sparks, University Park, PA 16802, USA, email: cub20@psu.edu

we prefer to speak of *dimensions* instead of pillars. The notion of the three pillars involves the image of a building whose roof is supported equally by three pillars of the same strength and length. The pillars, thus, are considered to be coequal, to have the same status. The crucial question is, however, what proportion the three pillars have to each other. Generally, justice is considered to be fundamental, and sustainability is interpreted as an issue of justice (WCED 1987). We also consider justice to be fundamental. However, the current discussion of sustainability shows a problematic reduction in which justice stands against the requirements of the economy, and the preservation of the natural basis of life is not sufficiently considered. This not only neglects the ecological aspect, but also reduces the issue of justice to the mere issue of distributive justice. Justice, however, is more than a mere measure for distribution of goods, opportunities, welfare, etc (Faber and Petersen 2008). In addition, aspects of political and social stability are also neglected. Although a just distribution may be one condition for the stability and continuance of political and societal structures, it is not the only condition, and it is not the only relevant aspect of justice in this context.

2. On justice

Why do we consider justice to be fundamental? Justice foremost is a virtue, an excellent attitude. One can, however, also denote states, organizations of politics and natural distributions of goods as just or unjust. Justice means to regard and recognize not only one's own interests, but also the interests of others. Justice also means not privileging from the outset the own interests over the interests of others. This is the backdrop of calls for a just distribution of goods and opportunities within a generation and between generations. Justice concedes a certain claim (right) to each (see e.g. Mill [1871]1998: Ch.5). However, this is not the complete meaning of justice. From a just distribution or order we also require that it provides to everyone what he or she deserves (Ulpian²), respects the dignity and freedom of everyone, and is stable and shows continuity. Aristotle (1985; 2000) focused on such a well-ordered stable (political and social) structure as a fundamental precondition of *eudaimonia* (happiness or, more literally, the good constitution of the soul). From our perspective, the discussions about sustainability so far have focused too narrowly on the material claims of current and future generations, and have neglected the aspect of stability. In these discussions it is recognized that lasting solutions for many sustainability issues can only be accomplished if one succeeds in constituting a fair balance between the poor and the rich; a fair balance among developed, developing, and less developed countries. However, it is not sufficiently recognized that the preservation of the natural basis of life is the foundation of any lasting solution to sustainability issues. Of course, only a stable and just society will be able to undertake the efforts which are necessary for sufficient environmental preservation. However, an intact nature is a necessary condition for any just distribution of opportunities. In this regard, the care for the natural basis of life must have priority against, for instance, further politics of growth.

Discussions about justice and sustainability have gone beyond the intra-generational dimension and have incorporated the inter-generational and inter-temporal dimension (see e.g. Barry 1997) and this is certainly a merit. However, in regard to justice of opportunities and distributive justice the discussions take place without adequate reference to the overall remaining and available environmental potentials, resources, and ecosystem services. The limits given by nature are mostly considered in a merely abstract way (with the exception of the climate change discussion) and, due to "heroic" assumptions about possibilities for substituting nature (Baumgärtner et al. 2006a: 5-7, 177) and expectations about efficiency, the limits of nature seem to increasingly lose their rigidity. Because it is suggested that the

² Ulpian was a Roman lawyer (170-223 AD).

dynamic of human interventions will be able to provide sufficient goods for distribution, the discussion about justice has substantially shifted toward the relationship among developed, developing and less developed countries, i.e. to the static dimension (the climate change discourse again is an exception, but seems to absorb public attention from other environmental issues). As important as the issue of intra-generational distributional justice may be – redistribution from the global north to the global south would certainly reduce current poverty and result in a fairer distribution of development opportunities – intra-generational distributional justice does not prevent the overuse of the natural environment. One might sarcastically say: if all US citizens would give their second and third cars to people living in poor countries in the global south, this might be considered as “good” in terms of distributional justice, but it would not be positive in terms of environmental harm or recognition of the limits of nature.

3. The natural basis of life

The preservation of the natural basis of life is by itself a requirement of justice, because the natural basis of life is a necessary condition for any lasting order of societies and the global community³. It has widely been recognized that we are currently close to, or have even exceeded, ecological limits and nature’s capacities to absorb human impacts (MEA 2005; IPCC 2007; UNEP 2007). If we consider the changes in developing countries such as China and India, and even more in less developed countries in Africa, global environmental burdens assume even more alarming proportions with regard to future development. There has certainly been some progress in environmental policy within the last forty years. In addition, technological progress has resulted in an increase of efficiency in energy and resource use. In certain regions and with regard to specific substances, a substantial reduction of pollution has been achieved. However, in many cases the actual pollution has not actually been reduced, but rather has been substituted with consequences yet not known, or shifted to other regions. The tremendous increase of energy use and of global CO₂ emissions by 80 percent between 1970 and 2004 and the projected growth of CO₂ emissions from energy use by 40-110% between 2000 and 2030 (IPCC 2007: 36-44) particularly prove that all efforts undertaken so far are by no means sufficient. It is highly doubtful that the resources and absorption capacities of the earth will suffice to maintain current living standards in developed countries while at the same time enabling the more than 3 billion people in developing countries to secure reasonable living standards; not to mention the additional 2.5 billion people expected to live on earth by 2050 (UN 2011).⁴

Until recently, we thought that the conception of the strategy of sustainable development, which has been evolving since Rio 1992 (UN 1992), might lead to a convergence of ecology and economy. We do not hold this creed anymore. The hypothesis of absolute decoupling of economic growth and environmental burdens (i.e. the assumption that future economic growth will be possible without an increase of environmental burdens and use of environmental resources), on which this creed was based, has proven to be wrong.

During the time when the *Limits to Growth* (Meadows et al. 1972) and the preparations for the Brundtland-Report (WCED 1987) affected the public, it seemed possible that the insights into

³ This is particularly an implication of Aristotle’s concept of justice that refers to stability and a well-ordered constitution as fundamental aspects of justice: “The laws have something to say about everything, their aim being the common interest [...]. So, in one sense, we call anything just that tends to produce or to preserve happiness and its constituents for the [political society]” (Aristotle, 2000, Book V, Ch.1, 1129b). This aspect of justice is discussed in detail in Faber and Petersen (2008: 410-414).

⁴ See also further data about various increasing environmental impacts such as biodiversity loss, deforestation, desertification, etc. (MEA 2005, IPCC 2007, UNEP 2007).

the ecological limits and responsibility for future generations could result in according adequate priority to the ecological dimension. Several political proposals exist in this regard. For instance, in Germany, the Federal Environment Agency (UBA), the German Advisory Council on the Environment (SRU) and the German Advisory Council on Global Change (WBGU) all support a concept of ecological limits. The sustainability strategy of the German Federal Government (GFME 2012) programmatically promotes the concept of *environmental space* (*Umweltraumkonzept*) (although the priorities of political action are often pragmatically determined otherwise).

Nevertheless, the ecological dimension has been rarely considered adequately. Only international climate policy considers the ecological dimension to some extent. In climate policy, the conflict between welfare and ecology appears clearly: the discourse on justice has an intergenerational focus and refers to the remaining ecosystem services. The negotiations on climate change consider both the static and dynamic dimensions of the issue. However, even climate change is discussed only in few countries deliberately with broad public and societal participation, and with regard to justice and ethical aspects (Becker and Brown 2012). This is one of the reasons that the discussions so far have not resulted in substantial political decisions and actions.

4. The economic dimension: welfare and efficiency

To facilitate the possibilities and means for living well is a crucial requirement of justice. In this regard, sustainability also encompasses the concepts of welfare and economic efficiency. However, discussions about the economy (which basically deals with human needs and preferences and efficient ways to satisfy them) have not substantially been influenced by the concept of sustainability so far. In particular, the concept of efficiency has not been advanced and is still used in a static (or comparative-static) meaning. This means that potential changes over time are not adequately considered, such as potential changes in technology, availability of resources, consumption patterns and preferences, or environmental damages. What is efficient today may easily become inefficient tomorrow due to the change of such parameters. In so far as one does not consider long-term consequences, it seems to be efficient not to waste any natural potential and use all available natural factors and resources to increase economic welfare. Such a narrow economic perspective is particularly problematic, because it does not recognize any absolute ecological limits (Baumgärtner et al. 2006b) which are crucial for the preservation of the natural basis of life. This holds for the use of natural resources in economic production as well as for the negative environmental impacts resulting from joint production (Baumgärtner et al. 2006a). The earlier warnings about the limits to growth articulated in discussion following the Club of Rome (Meadows et al. 1972) have been ignored or rejected on the basis of optimism about innovation and possibilities of substitution.

From a purely (neoclassical) economic perspective, it always seems to be useful to replace natural capital with technology and human-made capital. This seems to generate additional possibilities for action – and may seem to be the right strategy in the short term. To stimulate economic growth may also seem to be a proper strategy when it is assumed that growth will foster innovation which ultimately leads to the decoupling of economic growth and environmental burden. However, the risks and uncertainties of the systemic consequences of growth are neglected, and a proper institutional framework to study and consider these risks and uncertainties has not yet been sufficiently established. Negative external effects and long-term consequences are still not adequately considered in public discussions, concrete decision-making processes, and political and business actions. In summary, the fundamental discourses on justice and welfare both fail to adequately address the aspects of sustainability that were originally (attempted to be) emphasized by the sustainability concept and discourse:

The importance of considering and protecting the natural basis of life as the essential foundation of future development, welfare, and justice.

5. The meaning of growth

The dominance of the growth paradigm in the economic field and in growth policy is the main reason for prioritizing economic requirements against ecological requirements (Seidl and Zahrt 2010). There seems to be a broad consensus that sustainable development cannot be realized without continuous economic growth. Thus, issues of sustainability and development are mainly discussed with regard to justice and welfare, but not with regard to ecological aspects. The concept of growth plays a fundamental role in societal and public discourses.

Exponents of growth policy argue that growth supports justice⁵. Economic growth generates more potential for redistribution. By inducing innovation and efficiency, growth even seems to generate the possibility of bequeathing future generations “more nature” than in the case of forgoing growth. Growth exponents further argue that the important goal of sustainable fiscal policies and sustainable budgets can only be achieved by economic growth – at least if one does not want to achieve the reduction of debt solely by cutting government spending and reducing entitlements and social services. From this perspective, the usefulness and importance of economic growth seems to be without doubt: economic growth is considered to be the crucial link between justice and welfare. Without growth, justice between the global north and global south, and justice between generations, seems to imply that substantial sacrifices would have to be made by developed countries in support of developing and less developed countries, and by the current generation in support of future generations. However, far reaching sacrifices and redistributions might substantially undermine and endanger social systems and political stability of many countries. The better alternative, exponents of growth argue, is continuous economic growth. This argument is (often tacitly) based on the assumption that natural capital can be substituted by human-made capital, and that economic growth induces technological innovations—and, with this, gains in efficiency.

With this prominent and common argumentation, a paradigmatic dislimitation of the growth concept took place, which is in stark contrast to the arguments of the Club of Rome and the empirical findings on energy, resources, climate change, biodiversity, etc. It is also worth noting that economic growth by itself does not result in more justice. This becomes particularly evident with the increasing gap between the rich and the poor within many developed countries that have seen long periods of economic growth. We do not intend to criticize economic growth in general, nor to suggest some kind of “post-growth society” or “post-growth economy”. Rather, our intention is to criticize the dislimitation and dogmatization of growth, and the tendency to base whole economic and social systems, and the fulfilment of public tasks, on growth assumptions. We maintain that with regard to the concept of sustainability, economic growth needs to be limited insofar it endangers the natural basis of life. The crucial issue is neither the aim of economic growth nor the situational attempt to rapidly overcome the current crisis by stimulation of growth. Rather, the dangerous issue is making the functioning of the entire societal system continuously and fundamentally dependent on economic growth (Seidl and Zahrt 2010). This has been the main political course over the last decades and has led to the issuance of permanently increasing bills of exchange to the future which can only be answered by permanently increasing growth. However, systems that live with the hope of permanent (exponential) economic growth are at a high risk of becoming unsustainable. Such systems overburden not only the individuals who live and work in them, but also the natural systems within which they function. With this,

⁵ See e.g. for a critical discussion of this argument Faber (2008: 3).

growth will not be the solution to all sustainability issues, but will become the very issue that impacts future generations (Becker 2011). We have to consider, of course, that the current economy and larger parts of social and financial politics are based on the assumption of continuous economic growth, and that one cannot expect a substantial change in the short term. Nevertheless, we think it is important that the political and public discourse overcomes its fixation on economic growth, and that politics does not refer exclusively to growth as the solution of societal problems.

6. Repositioning the sustainability discourse

It is time to reposition the sustainability discourse. The facts and insights of the last four decades have demonstrated that the priority placed on growth-orientated policies jars with the limits given by nature and, thus, is incompatible with the requirements of environmental politics. We hold that with regard to the conflict between economic growth and environmental protection, sustainability politics needs to focus primarily on securing the natural basis of life. This claim is in contrast with mainstream economic politics, which nationally and internationally still adhere to the paradigm of unlimited growth. For instance, the European Commission states in its *Europe 2020 Strategy* the crucial role of growth (EC 2010),⁶ as does Obama in his *Strategy for American Innovation* (NEC 2009). Our critique extends also to the concept of “green growth”. Economic concepts with the prefix “green” (such as “green deal”, “green growth” and “green jobs”) may be fruitful political concepts insofar as they express and support the vision of environmentally compatible economic activities. However, these concepts are also often used to harden the continuous prioritizing of economic growth against environmental protection. The tacit, underlying thesis in this case is that by some increase in efficiency alone, all economic actions can become “green”. With this, however, counteracting effects of growing population and demand (rebound effects) are underestimated and, particularly, the ecological limits are not adequately considered.

It is time, thus, to dismiss the harmonizing sustainability rhetoric. The hope that there is no fundamental conflict between economic growth and environmental protection – that a win-win situation can always be achieved - has turned out to be an illusion: even enduring “green” growth will endanger the natural basis of life. We need the honesty to fully recognize and address the conflicts between economic growth and environmental protection. We need the courage to prioritize the long-term protection of the natural basis of life, and we need the persistence to continuously adhere to this new prioritization.

References

- Aristotle (2000): *Nicomachean Ethics*. Transl. R. Crisp. New York: Cambridge University Press.
- Aristotle (1985): *The Politics*. Transl. C. Lord. Chicago: Chicago University Press.
- Barry, B. (1997): Sustainability and Intergenerational Justice. *Theoria* 45: 43-65.
- Baumgärtner, S., M. Faber and J. Schiller (2006a): *Joint Production and Responsibility in Ecological Economics. On the Foundations of Environmental Policy*. Cheltenham. Edward Elgar.

⁶ “Europe 2020 puts forward three mutually reinforcing priorities: - Smart growth: developing an economy based on knowledge and innovation; - Sustainable growth: promoting a more resource efficient, greener and more competitive Economy; - Inclusive growth: fostering a high-employment economy delivering social and territorial cohesion.” (EC 2010).

- Baumgärtner, S.; C. Becker; M. Faber and R. Manstetten (2006b): Relative and Absolute Scarcity of Nature. Assessing the Roles of Ecology and Economics for Biodiversity Conservation. *Ecological Economics* **59**: 487-498.
- Becker, C. (2011): *Sustainability Ethics and Sustainability Research*. Dordrecht: Springer.
- Becker, C. and D. Brown (eds.) (2012, forthcoming): Special Issue on the Integration of Climate Change Ethics and Development Ethics. *Ethics, Policy, and Environment* **15**(3).
- EC [European Commission] (2010): *Europe 2020. A strategy for smart, sustainable and inclusive growth*. Brussels: European Commission (available at: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2010:2020:FIN:EN:PDF>).
- Faber, M. (2008): How to be an Ecological Economist? *Ecological Economics* **66**: 1-7.
- Faber, M. and T. Petersen (2008): Gerechtigkeit und Marktwirtschaft – das Problem der Arbeitslosigkeit. *Perspektiven der Wirtschaftspolitik* **9**: 405-423.
- GFME [German Federal Ministry of the Environment] (2012): *Goals of Germany's National Sustainability Strategy*. (http://www.bmu.de/english/strategy_legislation/sustainability/doc/46448.php, 22 May 2012).
- IPCC [Intergovernmental Panel on Climate Change] (2007): *Climate Change 2007. Synthesis Report*. Geneva: IPCC.
- Kates, R. W., Parris, T. M., & Leiserowitz, A. A. (2005): What is Sustainable Development? Goals, Indicators, Values, and Practice. *Environment: Science and Policy for Sustainable Development* **47**(3): 8–21.
- Meadows, D.H.; D.L. Meadows; J. Randers and W. Behrens (1972): *The Limits to Growth*. New York: Universe Books.
- Mill, J.S. [1871] (1998): *Utilitarianism*. Oxford: Oxford University Press.
- MEA [Millennium Ecosystem Assessment] (2005): *Ecosystems and Human Well-being: Synthesis*. Washington, DC: Island Press.
- NEC [National Economic Council] (2009): A Strategy for American Innovation. Driving Towards Sustainable Growth and Quality Jobs. (<http://www.whitehouse.gov/administration/eop/nec/StrategyforAmericanInnovation>, 21 May 2012.)
- Seidl, I. and A. Zahrt (eds.) (2010): *Postwachstumsgesellschaft, Konzepte für die Zukunft*, Marburg, Metropolis.
- UN [United Nations] (1992): *Rio Declaration on Environment and Development*. New York: United Nations.
- UN [United Nations] (2002): Johannesburg Declaration on Sustainable Development, in: *Report of the World Summit on Sustainable Development*, New York: United Nations, pp. 1-5.
- UN [United Nations] (2011): *World Population Prospects. The 2010 Revision*. New York: United Nations, Department of Economic and Social Affairs, Population Division.
- UNEP [United Nations Environment Programme] (2007): *Global Environment Outlook GEO-4. Environment for Development*. Malta: Progress Press.
- WCED [World Commission on Environment and Development] (1987): *Our Common Future*. Oxford: Oxford University Press.