

CON BRIO

VOLUME #5 | MÄRZ 2017



Sustainability affects everyone everywhere - today more than ever, considering the current global challenges and risks

Time for action - The Natural Step Germany supports you

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Member since 2016



Dr. Thomas Riegler is Partner of the taskforce Management on Demand AG. He draws upon 20 years of experience in management and directorial responsibilities, e.g. as CFO and CRO, to help companies through reorientation, restructuring phases, or even crises. In addition, he is Co-Owner and Managing Director of Sustainable Growth Associates (SGA), who founded The Natural Step Germany in 2016.

(1) The Challenge: Understanding the real sustainability challenge is crucial.

Simultaneously with the development of the human society in terms of size and power, our planet has grown ill and its global environmental and societal problems have been continuing and worsen.

Sound scientific data proof this for example by combining the Human Development Index (HDI) and the Ecological Footprint (EF) and by looking for trends.

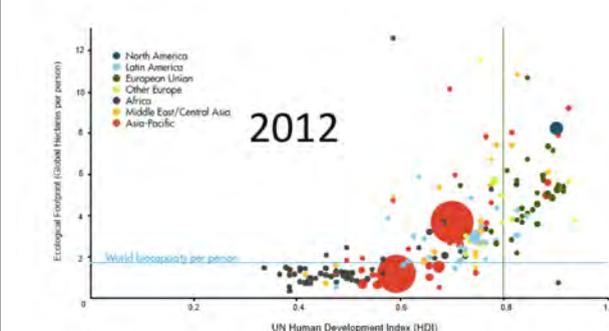
The Human Development Index (HDI) summarises the well-being of people in such respects as a long and healthy life, knowledge and a decent standard of living. At a scale from zero to one, the United Nations defines 0.8 as being worth striving for. Although the HDI simplifies human development, it is a valuable indication.

The Ecological Footprint shows us the degree of impact on nature's biocapacity in society's efforts to keep up with consumption. The Ecological Footprint is a reliable data-driven metric and accounting tool that measures natural resource supply and demand expressed as a global hectare. On the supply side, the Ecological Footprint shows how much nature, or biocapacity, we have. On the demand side, it shows how much we consume and who uses what.

Economies, populations, consumption and resource demands

are growing, but the size of our planet remains the same. We have only one planet to live on. In 2012, we had a maximum average of 1.8 hectares per person available. This figure is shrinking due to global population growth. Since 1970, we have been using up more renewable natural resources than our planet can regenerate. Actual usage, however, equals an average impact of 1.6 planets.

HUMAN DEVELOPMENT INDEX (HDI) RELATED TO ECOLOGICAL FOOTPRINT



Source: Ecological Footprint data from Global Footprint Network 2016, National Footprint Accounts, 2016 Edition, HDI values from UNDP

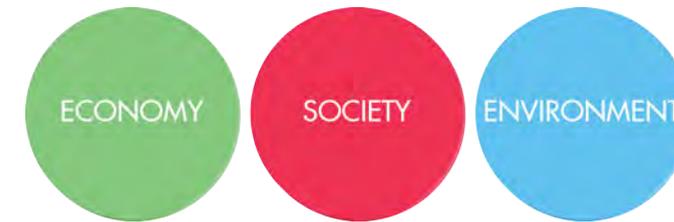
You will notice the two large red dots representing India and China, and the larger blue dot in the upper right representing

the United States.

The general trend that can be seen is that when human development of a country increases, the ecological footprint increases as well, often dramatically. In other words, solving one problem creates others. Obviously, human development should accelerate while at the same time minimising the ecological footprint so that all countries eventually show in the lower right corner.

A second aspect of the development is to understand the dependencies between the economy, the society and the environment

But, when dealing with our everyday economy, issues of society and the environment are often considered as completely separate. Or they are not considered at all.



For most of human history, human society has been small in comparison to the biosphere, with limited needs and causing minor effects. However, since the beginning of the industrial revolution, society has grown both in size and power. Cultural and technological advances, especially over the past centuries, have brought us progress in the form of access to knowledge, eradication of diseases, global increase in life expectancy and developments that enable comfort. The economy has been the driving force behind, without considering its impact on society and environment.



Meanwhile, also human society faces continuing and sometimes worsening problems, such as abuses of workers' and human rights, diseases, malnutrition, inequality and the lack of access to education.

We react to economically driven short-term headlines instead of bringing issues into the right context. Interdependencies between economy, society and environment still are not properly understood, nor are their impact. Each problem cannot be seen as a relatively isolated, unconnected event that will come and go.

Even, if it is recognized that there are limits to what the societal and ecological systems can provide for us, however, it is not recognized that the ability to provide those resources

and services is being systematically degraded.

People therefore tend to underestimate the seriousness of the sustainability challenge and the fact that it affects everyone, everywhere.

The good news: there is a solution and you are not alone. Applying The Natural Step's systems approach, we are able to drive real change and provide value for everyone without destroying our planet.

(2) The Solution for Strategic Sustainable Development

STOP VIOLATING THE SUSTAINABILITY PRINCIPLES

The natural and societal systems are being influenced more and more by humans, up to a point where we are degrading these systems on a global scale. In a nutshell, the root causes of unsustainability are:

- Extraction of a relatively large flow of materials from the earth's crust.
- Introduction and concentration of persistent chemical pounds foreign to nature.
- Physical inhibition of nature's ability to run cycles.
- Allowing the existence of obstacles to people's health, influence, competence, impartiality or meaning-making.



The rules of the sustainability game, or the conditions that need to be met, are derived on the basis of these root causes. At The Natural Step, we call them system conditions or sustainability principles.

OUR SUSTAINABILITY PRINCIPLES

IN A SUSTAINABLE SOCIETY ...



... nature is not subject to systematically increasing concentrations of substances from the earth's crust, e.g. heavy metals and fossil fuels.



... nature is not subject to systematically increasing concentrations of substances, produced by society, e.g. plastics and dioxins.



... nature is not subject to systematically increasing degradation by physical means, e.g. overfishing and destroying habitat.



... people are not subject to structural obstacles to health, influence, competence, impartiality and meaning-making.

The first three principles focus on an ecologically sustainable society. The fourth principle gives the condition to be met for a socially sustainable society. The structural obstacles refer to social constructions, like political, economic and cultural ones, which are firmly established in society. Upheld by those with power, and due to a variety of dependencies, these obstacles are difficult or impossible to overcome or avoid by the people exposed to them.

WHAT IS THE MEANING OF SOCIALLY SUSTAINABLE DEVELOPMENT?

At The Natural Step, we have based our scientific work on a triad of environmental, social and economic sustainability. The causes of ecological unsustainability have been fairly stable over the past 25 years. Hundreds of organisations have investigated them globally. However, ecological and social sustainability have been receiving growing attention worldwide. The awareness of the interrelations between the two has grown. The topic of social sustainability has taken more time to develop. We are proud of our scientists for bringing together multi-disciplinary social sciences with the purpose of defining concrete and comprehensible social sustainability principles.



HEALTH



INFLUENCE



COMPETENCE



IMPARTIALITY



MEANING-MAKING

Source: [The Natural Step](#)

WHOLE-SYSTEMS THINKING - NESTED INTERDEPENDENCE OF THE ENVIRONMENT, SOCIETY AND THE ECONOMY

We have always perceived our situation of being a small world living on a relatively large planet. But in reality, we have changed to a large world residing on a relatively small planet.

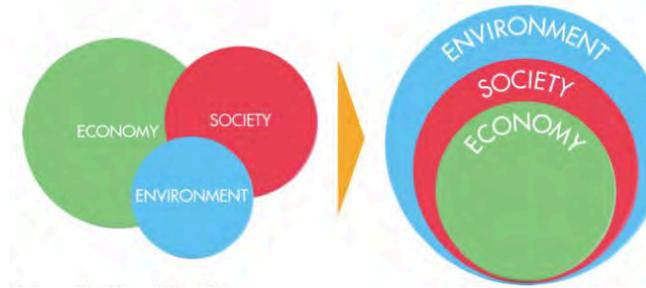
What can we see happening in our current society? Very often, we refer to effects or symptoms. We apply a direct cause-and-effect thinking and end up in creating quick fixes. Our attention focuses on details instead of fully understanding the

context. There is no doubt that when working on and debating specific issues, such as migration policies, melting ice predictions, inflation and deflation models, or car emissions regulations, we gain expertise on them, which is good.

Simultaneously we tend to narrow our view, thereby losing sight of links with other seemingly unrelated issues. As a consequence, communication at the general level becomes more difficult. All this happens with good intentions, but often leads to confusion and continued unsustainability. This is what we call reductionism.

TRADITIONAL VS. NEW PERSPECTIVE

Applying whole-systems thinking leads to the nested circles as THE perspective to draw conclusions from



By changing from a reductionist view to a whole-systems perspective, we immediately recognise the relationships and interdependence of the environment, society and the economy.

There is no economy without a society, and no society without the environment. Society and the economy are wholly owned subsidiaries of the environment. The model of nested interdependence also shows that human society cannot exist without food, clean water, fresh air, fertile soil and other natural resources. As a result, it is a very complex ecosystem that we depend upon.

Every organisation or business is part of the economy, society as a whole and the environment. It operates in or near local communities, it sells products and services to customers. Company relations rely on individuals, i.e. employees and physical resources, which are often sourced from suppliers. How a company is run both depends upon and affects society as a whole. Consequently, to stop degradation, benefits to the business should go beyond protecting the social and environmental systems it depends upon.

Now that we know what success looks like, we can strategically identify the gap between where we are today and where we want to be tomorrow. This enables us to bridge the gap with creative solutions, intelligent action and effective tools to build a flourishing sustainable society.

SUMMARY:

To find solutions for the sustainability challenge:

- We need to follow the whole-systems thinking approach where the nested interdependence of the environment, society and the economy is considered
- We have to stop violating the sustainability principles
- Then we can define success in the context of this specific system
- Consequently we can derive our strategy and actions to be successful and fit-for the future to achieve a sustainable flourishing society

The Natural Step provides a solution for both the definition of success and a proven approach to achieve it. If you want to know more, please visit our website www.thenaturalstep.de and [contact us](#). You are very welcome to join our network!



The Natural Step Germany:

About The Natural Step:

Founded in 1989 in Sweden, The Natural Step is a globally recognised brand representing a group of non-profit organisations and associates helping organisations and individuals understand and accelerate change towards sustainability and a flourishing future. We operate under the patronage of King Carl XVI Gustaf of Sweden.

Our Vision:

A world in which people's basic human needs can be satisfied and where societies and organisations can prosper within nature's limits.

Our Purpose:

To accelerate the transformation towards sustainability and a flourishing future.

Our Core Areas of Work:

We inspire, train, facilitate, coach, research, analyse, advise and publish in three core areas in order to live our purpose and accelerate towards our vision:

- Empowering individuals to become effective change agents for sustainability.
- Creating future-fit organisations, including their processes, products and business models as leading examples of sustainable communities and businesses.
- Facilitating systems change towards future-fitness by delivering breakthrough results that make whole systems truly sustainable.

Please join us as a member of a like-minded community or become a partner of our network: www.thenaturalstep.de.