



Pro-DEENLA

LEUPHANA
UNIVERSITY OF LÜNEBURG

Steinbeis Innovation Center
Logistics and Sustainability

“SUSTAINABLE DEVELOPMENT” LEARNING MODULE

NOTES FOR
TRAINERS/TEACHERS



SPONSORED BY THE



Federal Ministry
of Education
and Research

bibb Federal Institute for
Vocational Education
and Training

CONTENTS

NOTES FOR TRAINERS/TEACHERS

Learning module context	3
Learning module content	3
Summary of the “Sustainable development” learning module	6
Learning phase overview for the learning module “Sustainable development”	7



LEARNING MODULE CONTEXT

The following learning module on the theme of “sustainable development” serves as an introductory foundation for work on further “Pro-DEENLA” learning modules and can therefore be regarded as an interdisciplinary module. The theme of “sustainable development” is implied in several occupational profiles in the general training plan for vocational education and training as a freight forwarding and logistics services clerk.

The following module focuses on introducing the idea of sustainable development and on identifying and reflecting on sustainable behaviour in your own company.

LEARNING MODULE CONTENT

There has been much heightened public debate over recent years concerning the concept of “sustainability”. The concept itself is far from new and originally comes from forestry management. In this context, sustainability is regarded as a fundamental principle in the care and use of woodland. Sustainable operation of forest management means that woodlands must not be cut down without safeguarding the long-term future of wood as a raw material by means of concurrent reforestation. This definition, coined as far back as the 18th century by Hannß Carl von Carlowitz, chief mining officer for Saxony, has been applied to other areas of life since the 1970s due to the increasing negative environmental impact of how most of us live, work and do business.

Following the conclusion that sustainable economic development is not achievable without preserving the viability of ecosystems, the United Nations Commission for Environment and Development (the Brundtland Commission) was formed in 1983. The goal of this Commission was to create recommendations for action to ensure sustainable development. In their report published in 1987, the Commission formulated, among other things, the widely accepted Brundtland definition of sustainable development. According to this, development is sustainable if it “meets the needs of the present without compromising the ability of future generations to meet their own needs” (Hauff, 1987 p. 46). This definition formulates sustainable development as an issue of equity, addressing the assumption of responsibility from a global perspective for both future and present generations.

The assumption of responsibility for future generations concerns the long-term preservation and development of the basis of human life given the limits of the natural environment and the future economic and social risks this entails. From a global perspective, the assumption of responsibility for present generations concerns the equitable distribution of opportunities for people living in the present to meet their needs. The degree of intergenerational equity is therefore linked specifically to the question of how environmental (e.g. water, land, food/raw materials), social (e.g. opportunities to exert an influence and make a choice) and economic resources (e.g. technology and services) are distributed among the present generations.

Intragenerational and intergenerational inequalities may then arise, for example, if ways of living, working and doing business are characterised by the heavy use of environmental assets, the adverse ecological impact of which then affects other people (e.g. in developing countries or in the future). A further example of intragenerational equality is the avoidance of unequal opportunities in the job market for employees of different ages.

However, because the Brundtland definition remains open to interpretation, the idea of sustainable development was defined more precisely in 1992 at the World Summit in Rio de Janeiro and by the follow-up process to Rio. This process included the UN Sustainable Development Summit of heads of state and government in 2015, at which the global community agreed to adopt 17 specific sustainable development goals to be achieved by 2030:

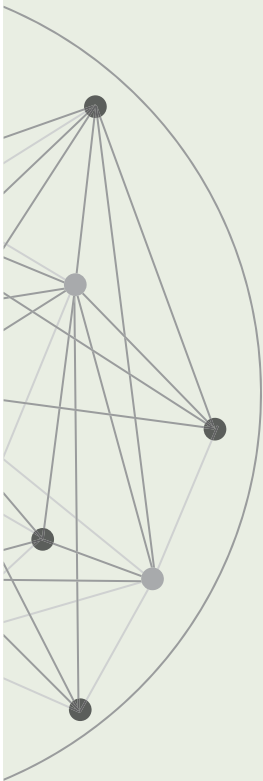
1. End poverty in all its forms everywhere
2. End hunger, achieve food security and improved nutrition and promote sustainable agriculture
3. Ensure healthy lives and promote well-being for everyone at all ages
4. Ensure inclusive, equitable and high-quality education and promote lifelong learning opportunities for all
5. Achieve gender equality and empower all women and girls
6. Ensure availability and sustainable management of water and sanitation for all
7. Ensure access to affordable, reliable, sustainable and modern energy for all
8. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all
9. Build resilient infrastructure, promote inclusive and sustainable industrialisation and foster innovation
10. Reduce inequality within and among countries
11. Make cities and human settlements inclusive, safe, resilient and sustainable
12. Ensure sustainable consumption and production patterns
13. Take urgent action to combat climate change and its impacts
14. Conserve and sustainably use the oceans, seas and marine resources for sustainable development
15. Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and end and reverse land degradation and put a stop to biodiversity loss
16. Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels
17. Strengthen the means of implementation and revitalise the global partnership for sustainable development

Companies have a key role to play on the path to achieving these goals due to their commercial value-added processes and their consequences as well as due to their innovative capabilities. Several specific concepts and strategies may be applied along this path. Differentiating sustainability into economic, environmental and social dimensions has established itself internationally both at government and at company level as a model for defining and clarifying the idea of sustainable development.

The environmental sustainability dimension relates to preserving the features of the ecosystem. A way of life is deemed to be ecologically sustainable if it uses natural resources only to the extent that these are also able to regenerate themselves. Key terms in environmental sustainability are: “environmental stability”, which describes the permanence of natural systems; “vulnerability”, which describes susceptibility to external influences; and “resilience”, which describes the capacity for regeneration.

The economic sustainability dimension relates to the ongoing preservation or establishment of a sufficient quality of life—i.e. the tangible and intangible necessities of life. A feature of economically sustainable development is that it does not impact adversely on present and future generations. One challenge in this respect, for example, is that natural energy and material resources form the basis of the way in which most of us live and do business, but at the same time cause emissions and waste.

The social sustainability dimension concerns the globally equitable distribution of social basic goods and passing these on to future generations. This includes, for example, food, health, clothing, living space, political rights, tolerance, solidarity as well as a sense of legality and justice. The aim on the one hand is to enable the individual to lead their lives in a dignified and self-determined manner, and on the other to ensure social cohesion and to enable social tensions to be addressed and resolved by civil means.



There are certainly differing views when it comes to the specific weighting and prioritisation of these three dimensions. As part of their final report, however, the German Bundestag's committee of enquiry—“Protection of mankind and the environment”—declared in 1998 that these three dimensions for implementing the model of sustainable development should be seen as being of equal value over the long term and should be addressed on an equal footing.

The recommendation for the three dimensions of sustainable development to be considered as being of equal value and needing to be addressed on an equal footing can result in conflicting objectives in the context of (commercial) decision making. (Aspiring) management assistants must therefore be able to deal with these types of conflicting objectives.

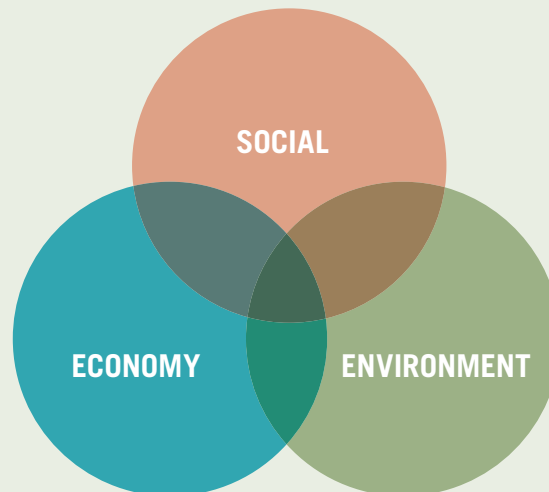


Figure:
Intersection model of economic,
environmental and social
sustainability

SOURCES:

Federal Ministry for Environment, Nature Conservation and Nuclear Safety (BMU) (2018) *The 2030 Agenda for Sustainable Development*. Available online at: <https://www.bmu.de/themen/nachhaltigkeit-internationales/nachhaltige-entwicklung/2030-agenda/>. Accessed on 11/20/2019

Carlowitz, H. C. (1713): *Sylvicultura Oeconomica, or domestic information and instructions for the natural growing of wild trees* [*Sylvicultura oeconomica oder haußwirtschaftliche Nachricht und naturmäßige Anweisung zur wilden Baum-Zucht.*] Leipzig.

German Bundestag's committee of enquiry (1998) *Concept of sustainability from outline to implementation* [*Konzept Nachhaltigkeit Vom Leitbild zur Umsetzung.*] Available online at: <http://dip21.bundestag.de/dip21/btd/13/112/1311200.pdf>. Accessed on 07/02/2017

Fichter, K. (1998): *Steps towards sustainable enterprise—requirements and strategic starting points* [*Schritte zum nachhaltigen Unternehmen - Anforderungen und strategische Ansatzpunkte.*] In: Fichter K./Clausen, J. (published): *Steps towards sustainable enterprise. Future-oriented concepts of environmental management in practice* [*Schritte zum nachhaltigen Unternehmen. Zukunftsweisende Praxiskonzepte des Umweltmanagements.*] Berlin, p. 3–26.

Grunwald, A., & Kopfmüller, J. (2012): *Sustainability* [*Nachhaltigkeit.*] Frankfurt am Main.

Hauff, M. v., & Kleine, A. (2009): *Sustainable development. Fundamentals and implementation* [*Nachhaltige Entwicklung. Grundlagen und Umsetzung.*] Munich

Hauff, V. (1987): *Our Common Future. The Brundtland Report of the World Commission on Environment and Development* Grevén.

Miller, J. (2003): *Sustainability—a modern forestry management concept.* [*Nachhaltigkeit - ein moderner Begriff, der aus der Forstwirtschaft kommt.*] In: “LWF aktuell” magazine from the State Institute of Bavaria for Forestry and Silviculture (issue 37), pp. 30–33.

German Advisory Council on the Environment (SRU) (1994) *Environmental Report 1994 for sustainable, environmentally compatible development* [*Für eine dauerhaft-umweltgerechte Entwicklung.*] Stuttgart.

German Advisory Council on the Environment (SRU) (2012) *Environmental Report 2012 Responsibility in a finite world* [*Verantwortung in einer begrenzten Welt.*] Berlin.

United Nations (2015): *Millennium Development Goals 2015 Report*. New York.

United Nations (2015): *Transforming our World: The 2030 Agenda for Sustainable Development* Available online at: <https://www.un.org/Depts/german/gv-70/band1/ar70001.pdf>. Accessed on 11/20/2018



United Nations (2016): *Sustainable development goals 2016 Report*. New York.

SUMMARY OF THE “SUSTAINABLE DEVELOPMENT” LEARNING MODULE

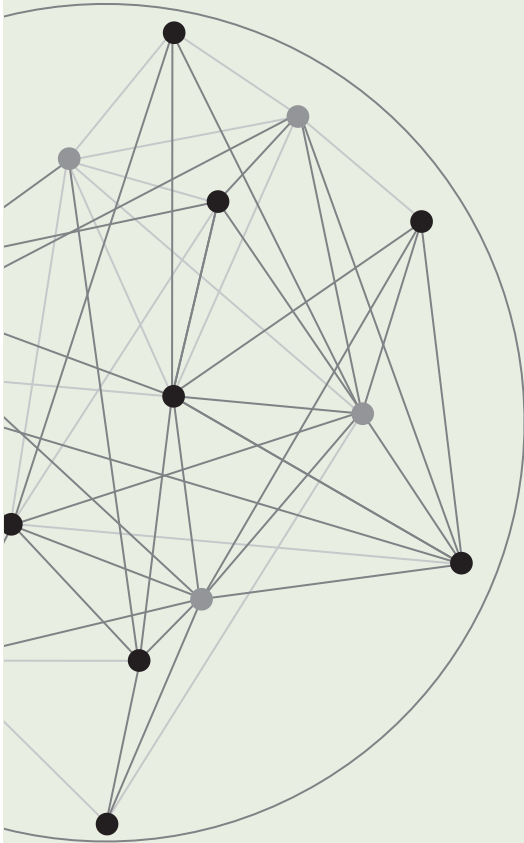
Classification under training regulation:	Basic interdisciplinary topic
Topic:	Sustainable development
Type of learning task	Basic learning task and connecting learning task
Learning venues:	Workplace and company or study space
Learning arrangements:	Individual work, and partner or group work
Objective:	The aim of this learning module is for learners to gain an initial insight into the idea of sustainable development, and for them to identify and reflect on sustainable behaviour in their own company.
Brief description and module context:	<p>First, trainees acquire an understanding of the basics of sustainable development by addressing intra- and intergenerational equity and the three-dimensions-concept. The basics are developed using trainees' examples from their private and professional lives. In a second step, the trainees compare their individual points of view with those of their colleagues. As part of this they discuss whether one of the sustainability dimensions should be prioritised. Based on this, trainees address sustainable behaviour in their own company by using an employee survey to identify which sustainability dimensions are considered a priority in their own company. Finally, the trainees reflect on the results of the survey by inferring potential consequences for themselves and their company, and by showing how these might be subsequently considered in their own company.</p> <p>This module serves as an introductory foundation for work on further “Pro-DEENLA” learning modules and can therefore be regarded as an interdisciplinary module.</p>
Content and tasks:	<ul style="list-style-type: none"> - Intra- and intergenerational equity - The three-dimensions-concept - Discussion about prioritising of individual sustainability dimensions - Addressing sustainable behaviour in one's own company as part of an employee survey - Identification of potential consequences from the survey for one's own sustainable behaviour and for the sustainable activity of the company - Presentation of how these ideas might be subsequently taken into account in the company.
Materials required:	<ul style="list-style-type: none"> - Flipchart paper and flipchart markers



LEARNING PHASE OVERVIEW

LEARNING PHASES	SEQUENCE OF ACTIVITIES FOR LEARNERS	EXPLANATION OF LEARNING METHODS AND TECHNIQUES	NOTES ON RESOURCES
 INDIVIDUAL WORKING IS ADVISABLE IN THE INTRODUCTORY PHASE			
INTRODUCTORY PHASE	<p>Before trainees can address the issue of whether their company acts sustainably, they need to acquire an overview of sustainable development as an idea. To do this they research</p> <p>a) ...what intragenerational and intergenerational equity involves</p> <p>b) ...what the three-dimensions-concept of sustainability involves (see figure)</p> <p>They then give examples corresponding to the individual dimensions of sustainability, develop their examples in the context of intragenerational and intergenerational equity, and weigh up which of the dimensions is most important to them.</p>	<p>Learners are given advice on research with respect to suitable search terms, the quality of sources, how to back these up and report them.</p> <p><u>(Note 1)*</u></p>	<p>It makes sense to have a PC available for trainees to research on.</p>
 PARTNER WORK OR GROUP WORK IS ADVISABLE IN THE ANALYSIS AND DEVELOPMENT PHASE, AND THE PRESENTATION AND REFLECTION PHASE			
ANALYSIS AND DEVELOPMENT PHASE	<p>Once the trainees have considered the three dimensions of sustainability from their own personal perspective, they compare their assessments with those of others and, as part of a discussion, come to a joint assessment which they present on a piece of flip chart paper.</p>	<p>Trainees are given advice on conducting a discussion.</p> <p><u>(Note 2)*</u></p>	<p>For the presentation, the trainees need flipchart paper and pens.</p>
PRESENTATION AND REFLECTION PHASE	<p>The trainees then consider their company with respect to sustainable behaviour. To do this, they write questions on sustainable behaviour in the company which they ask colleagues from various departments to answer as part of an employee survey.</p> <p>Once the trainees have gained an impression of sustainable behaviour in their company, they reflect on the responses from the employee survey and infer potential consequences from these. The trainees then write up the results so that they can present them to company management if required.</p>	<p>In order to identify sustainable behaviour in their company, the trainees are given tips on writing questions <u>(Note 3)*</u> and on the employee survey. <u>(Note 4)*</u></p> <p>The learners also receive questions to guide them when reflecting on the employee survey.</p>	

* see notes for trainees/students



IMPRINT

*Leuphana University of Lüneburg, Business Education Unit, Universitätsallee 1, 21335 Lüneburg
Steinbeis Innovation Center Logistics and Sustainability (SLN), Dresdener Straße 17, 74889 Sinsheim, Germany*

Editorial staff: Prof. Dr. Andreas Fischer, Harald Hantke, Jens-Jochen Roth, Kristin Senneke

Design and print setting: Anke Sudfeld

Photos/Illustrations: Fotolia: S. 1+2

LICENSE NOTE

*This learning module is subject to the Creative Commons license "Attribution - ShareAlike 3.0 Germany (CC BY-SA 3.0 DE)".
Explanation of the license: <https://creativecommons.org/licenses/by-sa/3.0/de/deed.en>*