



SDG 2: Zero Hunger

University of Applied Sciences Burgenland



2 ZERO HUNGER



**Interpretation
of hunger issues**



Main goal: to end hunger, achieve food security and improved nutrition and promote sustainable agriculture

In Europe we find food in abundance on supermarket shelves. However, about 800 million people in the world suffer from malnutrition, most of them women and children. Even more people suffer from malnutrition, which means they lack certain nutrients such as iron or vitamins. The UN wants to end hunger in the world by 2030. To achieve this goal, the UN calls for the doubling of food production and a reduction in food waste. Particular attention should be paid to sustainable agriculture, the preservation of biodiversity and fairer trade.



Source: [germanwatch.org](https://www.germanwatch.org)

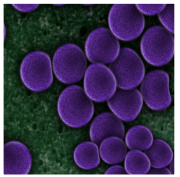
What does hunger as malnutrition mean?



4 forms of undernutrition:

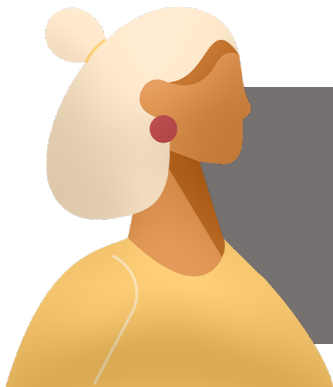
...wasting, stunting, underweight and deficiencies in vitamins and minerals

Source: who.int



Did you know that “around 45% of deaths worldwide among children under 5 years of age are linked to undernutrition”?

Source: who.int



“Reading about undernutrition brings those heart-breaking pictures of undernourished children to my mind. I cannot even imagine what life must be like for them and their families. It feels so far away, too far for me to get into it emotionally. What would need to happen for us in the Western world to move us beyond the feeling of being powerless vis-à-vis these kinds of situations?”

What does malnutrition mean?



Micronutrient-related malnutrition:

Micronutrients enable the body to produce enzymes, hormones, and other substances that are essential for proper growth and development.

Source: who.int



Did you know micronutrient deficiencies are called the “hidden Hunger”, as the resulting health impacts may not always be acutely visible?

Source: ifm.org



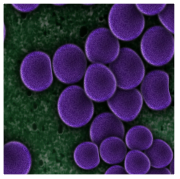
“I recently read somewhere that we in Western Europe also suffer from malnutrition because we choose the wrong foods (lacking vitamins and minerals and having too much sugar), and then I realized that I, too, am grabbing the wrong foods for emotional reasons. What a crazy world this is.”



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What does malnutrition mean?



Overweight and obesity:

...occurs when a person is too heavy for his or her height — resulting from an imbalance between energy consumed (too much) and energy expended (too little).

Source: who.int



Did you know that “1.9 billion adults are overweight or obese, while 462 million are underweight.” In 2018, one in five 15-year olds was either overweight or obese on average across EU-countries.

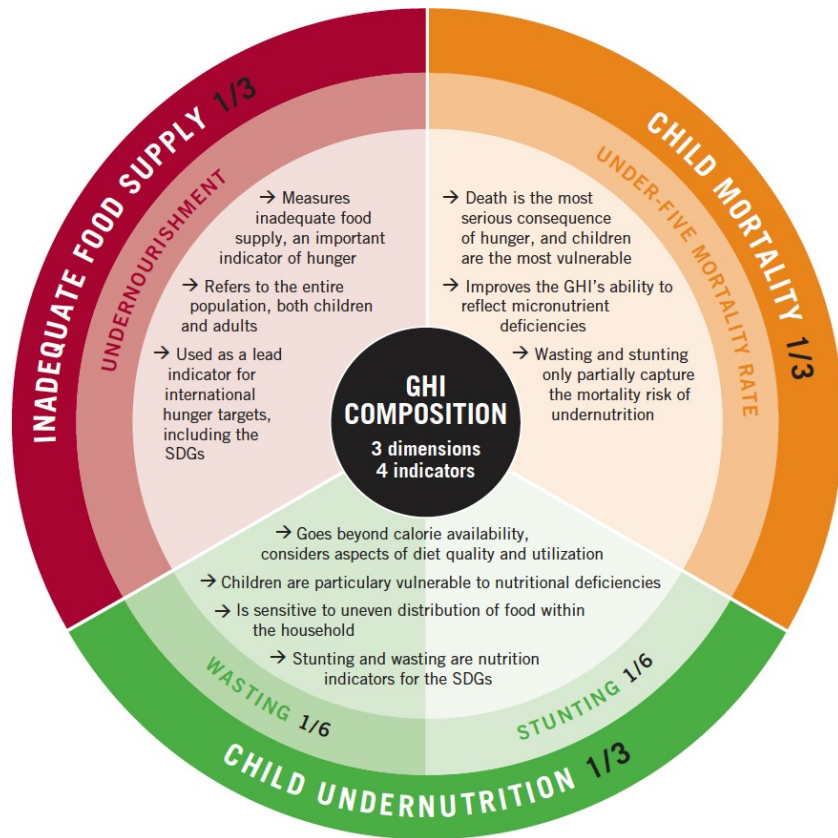
Source: oecd-ilibrary.org



“I started gaining excess weight when I started school in 1975. I became a victim of single parent syndrome. This is where a parent compensates for things with food”—Jason Ward, Southsea

Source: bbc.com

Model: global hunger index



Source: globalhungerindex.org



Did you know that „The Global Hunger Index (GHI) is a tool designed to comprehensively measure and track hunger at the global, regional, and country levels? The International Food Policy Research Institute (IFPRI) calculates GHI scores each year to assess progress, or the lack thereof, in combating hunger. The GHI is designed to raise awareness and understanding of the struggle against hunger.”

Source: ifpri.org

Subgoals: targets and measures

2.1

By 2030, end hunger and ensure access by all people, in particular the poor and people in vulnerable situations, including infants, to safe, nutritious and sufficient food all year round.

2.2

By 2030, end all forms of malnutrition, including achieving, by 2025, the internationally agreed targets on stunting and wasting in children under 5 years of age, and address the nutritional needs of adolescent girls, pregnant and lactating women and older persons.

2.3

By 2030, double the agricultural productivity and incomes of small-scale food producers, in particular women, indigenous peoples, family farmers, pastoralists and fishers, including through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets and opportunities for value addition and non-farm employment.

2.4

By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality.

2.5

By 2020, maintain the genetic diversity of seeds, cultivated plants and farmed and domesticated animals and their related wild species, including through soundly managed and diversified seed and plant banks at the national, regional and international levels, and promote access to and fair and equitable sharing of benefits arising from the utilization of genetic resources and associated traditional knowledge, as internationally agreed.

Source: [bundeskanzleramt.gv.at](https://www.bundeskanzleramt.gv.at), [renn-netzwerk.de](https://www.renn-netzwerk.de) and [un.org](https://www.un.org)

Targets = Numbers, Measures = Letters

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Subgoals: targets and measures



Source: bundeskanzleramt.gv.at, renn-netzwerk.de and un.org

Targets = Numbers, Measures = Letters



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**Current state of
hunger issues**

Report 2020

The Sustainable Development Goals Report 2020



Source: un.org

The Sustainable Development Goals Report 2021



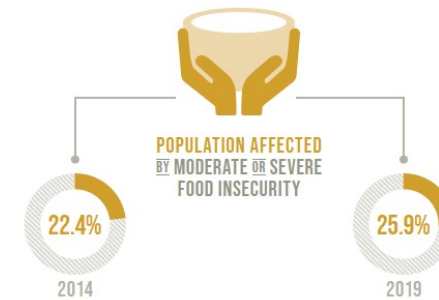
Source: un.org



END HUNGER, ACHIEVE FOOD SECURITY AND IMPROVED NUTRITION AND PROMOTE SUSTAINABLE AGRICULTURE

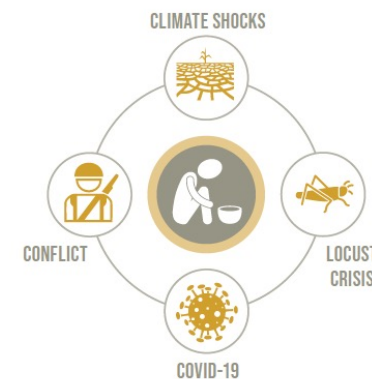
BEFORE COVID-19

FOOD INSECURITY WAS ALREADY ON THE RISE

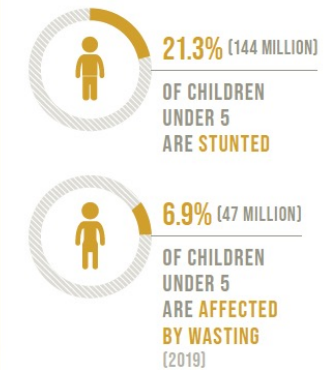


COVID-19 IMPLICATIONS

THE PANDEMIC IS AN ADDITIONAL THREAT TO FOOD SYSTEMS



STUNTING AND WASTING AMONG CHILDREN ARE LIKELY TO WORSEN



SMALL-SCALE FOOD PRODUCERS ARE HIT HARD BY THE CRISIS



COMPRISING 40%-85% OF ALL FOOD PRODUCERS IN DEVELOPING REGIONS

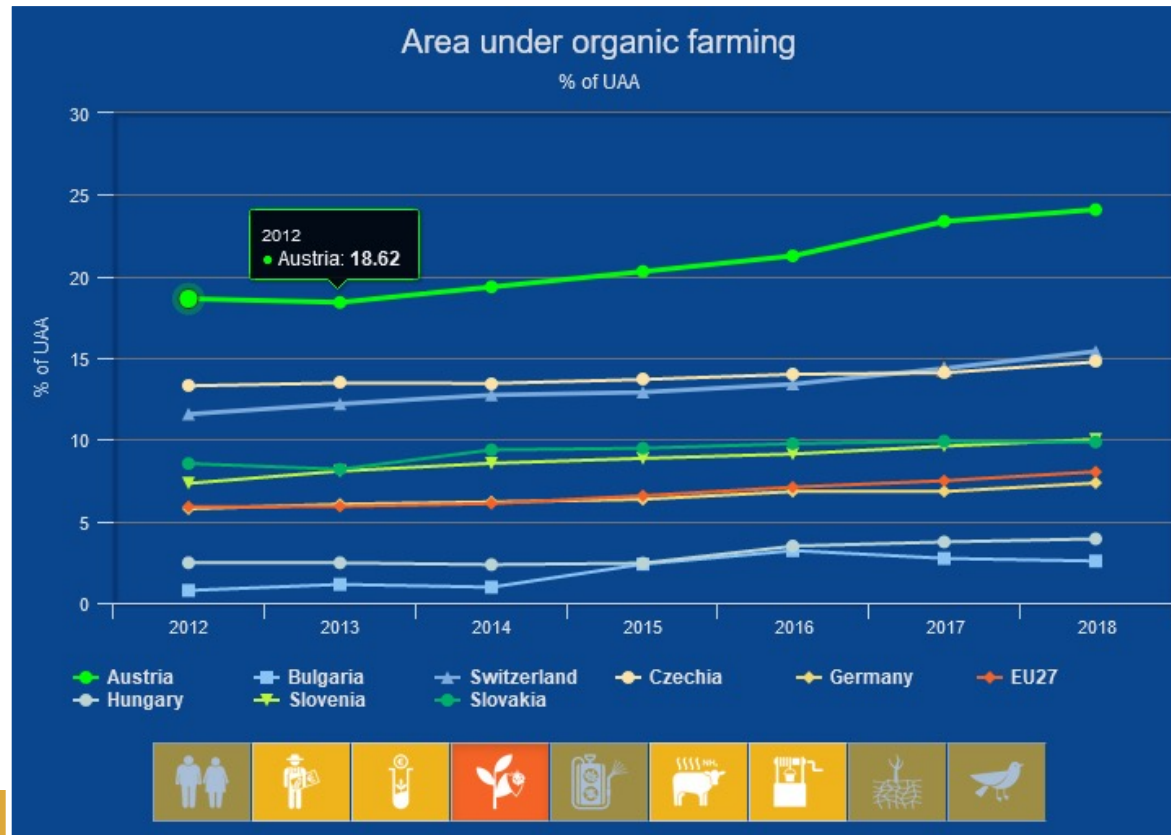
Source: un.org

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Some European statistics



Sources: ec.europa.eu and ec.europa.eu



Did you know that Austria is having the highest percentage of organic farmers within Europe?

"I was in the supermarket yesterday and have tried to find regional and seasonal Austrian vegetables and fruits, there were only apples and potatoes available for buying, the rest were bananas, salad, pepper, strawberries, raspberries etc. and came from Spain, Marocco, Peru, Costa Rica. And only a few were coming from organic farming."



Implementation in Austria as of 2020

Target	National indicators (selected)	Trend
2.1	TARGET: End hunger	✓
2.2	Underweight in 8-year-olds	⋮
	Obesity in 8-year-olds	⋮
2.3	TARGET: Equal access to agricultural production	✓
2.4	Proportion of total agricultural area under organic agriculture (excluding Alpine pasture)	↑
2.5	Cultivated plant varieties secured for agricultural use	↑
	Farm animal breeds secured for agricultural use	↑

Source: Statistics Austria. 8-year trend 2010–2018 (if figures missing, at least 7-year trend) in 4 categories (↑↗↘↓) if there is a clear target (quantitative/normative); ✓ (part of the) indicator target achieved; ⋮ calculation of trend not possible. More information about methodological questions can be found in the National Indicator Report 2020.

- > Austria has successfully implemented the goal to end hunger.
- > The proportion of organically farmed land in Austria increased significantly from 18.4% (2010) to 23.2% (2018).
- > Austria is the frontrunner in the European Union with its proportion of land used for organic farming.
- > There was a clear increase in the number of livestock breeds and cultivated plant varieties secured for agricultural use between 2010 and 2018.



Did you know that in Austria almost 14.5% are obese (with BMI above 30)? The European Union average is 15.2%. Spain, Portugal, Slovakia clock in at about 16%. On the contrary, only 2.7% of people living in Austria fall in the underweight category.

Source: ec.europa.eu



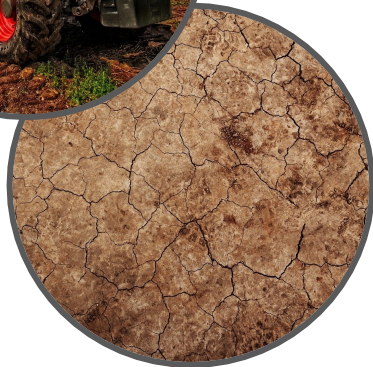
Main issues to solve in Austria as of 2020



Malnutrition
(especially overeating)



Structural change in
agriculture



Soil compaction
and erosion



Did you know that 41% of adults and 28% of children and adolescents are overweight or obese in Austria because of malnutrition?

Did you know that the proportion of obese women with higher levels of education is around 30% lower?

Sources: ec.europa.eu



Sources: uninetz.at

"My son came home from school the other day and told me that some of the other kids just bring chocolate bars to school for a snack, and only a few bring fruits or veggies."



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**Potential
contributions
Learning activity**

Before thinking about potential contributions...

- Imagine an organization (business).
What is the core purpose of this organization*?
- Who are this organization's internal and external stakeholders?
- How does “hunger” impact this organization (its purpose, its stakeholders, its operation, its viability)?
- What challenges and/or costs emerge from this “impact of hunger” upon this organization?
- On the other hand, what opportunities and/or benefits arise?
- With all this in mind, what contributions** might this organization make to reach SDG 2 within its sphere of influence via inward and outward actions?

* Meant here are all sizes, all types

** Consider contributions inside the organization (referring to everything that is a resource to the organization and is directly or indirectly controlled by the organization, for instance, human resources, know how, monetary and material resources) and the outside of the organization (referring to everything outside of the organization that it can influence but lies outside of its control, for instance, policy change, partnering with other organizations, etc...)



Potential contributions by educational institutions

The purpose of educational institutions is to educate and train for life and for particular professional interests.

In terms of SDG 2, the tasks lie in offering healthy food choices and teaching about sustainable consumption and health-conscious behaviors, also to support organic farming and local producers, and avoid food waste.



Did you know that, based on a study and as a first step, the ÖAIE is demanding the introduction of compulsory nutrition lessons by teachers trained in nutrition medicine and the rapid elimination of infrastructural deficiencies at the school locations in order to implement the daily gymnastics lesson in a meaningful way?

Source: meinbezirk.at

"I felt that I was doing really well when I prepared healthy snacks for my daughter (apple and carrot pieces cut into animal shapes for instance)... until I found out that the kids trade their food with others in school, and that my beautiful mini-carrots were highly valued in exchange for other "junk" food. Grrr..."

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Sources: renn-netzwerk.de and unesco.at



Potential contributions by educational institutions, cont.

Potential inward actions:

- create an environment and policy that fosters healthy eating habits and exercise by including healthy lifestyle options loaded with nutritional infos in various curricula (linked to sustainability themes)
- implement training how to stop food waste and create awareness on how to check if food is still usable after it expires officially
- offer food-related learning opportunities, such as nutrition check and cooking classes and sessions about food preservation (drying, salting, potting, bottling, etc...)

Potential outward actions:

- support organic agriculture through local partnerships with small farmers or cooperatives for lunch meals and snacks, and catering
- lobby with the local government to create and enforce policy that leads to local organic food in all schools
- partner with local institutions and social markets to avoid food waste

Potential contributions by municipalities

The purpose of municipalities is to plan, manage, and improve public work and services to the community.

In terms of SDG 2, the tasks lie in supporting and/or organizing local farm-to-table and other projects that connect people living in the area to healthy food choices.



Did you know that around 600,000 people in Austria have problems being able to afford good, balanced food while 300€ per person per year are just thrown away?

Source: gemeindebund.steiermark.at

Potential contributions by municipalities, cont.

Potential inward actions:

- plant public areas with fruit trees and berry bushes for all to enjoy (Naschgarten)
- create community-raised beds in public spaces for growing herbs and mini-veggie gardens
- organize cooking courses on healthy eating habits with local recipes and food (also for tourists)

Potential outward actions:

- organize farmers' markets, farmers' shops and regional corners in local supermarkets
- support food banks and social markets in the region
- support/manage local farmers' shops for 24-hour shopping



"I love to buy at the local farmers shop, I know the people who produce the products and I trust them, I believe the products taste better"



Potential contributions by corporations and other organizations

The purpose of for-profit organizations (ie business) is to provide a service in exchange for resources (ie money). The purpose of non-profit organizations is to impact society in a certain way. Both need to generate and/or collect adequate resources to pay for their operations and activities and/or make profit.

In terms of SDG 2, the opportunities for contribution may vary greatly between different types or sizes of organizations, but their core contributions to society for reaching SDG 2 are to raise awareness of healthy food and lifestyle choices and to offer healthy sustainable food choices to their employees (respectively partner with local providers).



Did you know that each Austrian throws away 19 kilo of still eatable food annually, translating to 300 € a year? This is worth 1 billion € only in Austria and means 157.000 tons of food (not counting drinks and milk).

Source: bmlrt.gv.at

Potential contributions by corporations and other organizations, cont.

Potential inward actions:

- offer learning programs for sustainable food choices and healthy eating habits, as well as lifestyle choices related to overweight and obesity, and to offer organic, healthy food choices to employees
- Calculate and publish the nutritional value of food offered at work and/or the 10 most often eaten lunches of your employees to stimulate discussion among staff members
- initiate company-internal food-saving or food-sharing days

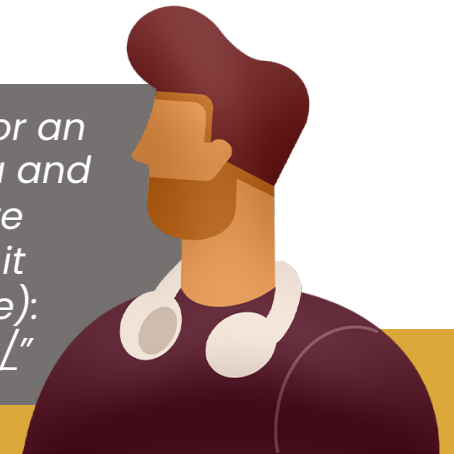
Potential outward actions:

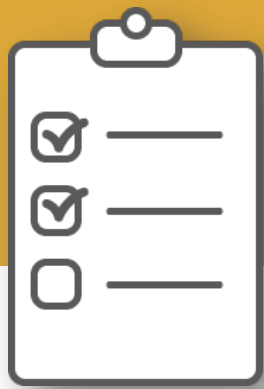
- organize fun activities that facilitate collaborative, community-based learning about sustainable small farming and cooking (staff & their families, stakeholders)
- support local food coops in various ways
- partner with local organic slow-food restaurants / caterings

"I recently found this useful link for an initiative in Europe, also in Austria and Germany, and told my favorite restaurant and bakery about it (hoping they might participate): <https://toogoodtogo.at/de-at/>"



Source: sdgcompass.org





Activity: potential contributions by an organization of your choice

The purpose of xyz organization is to....

In terms of SDG 2, potential contributions by xyz organization might be:

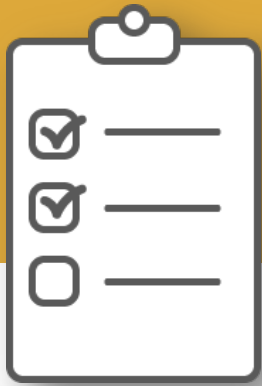
Potential inward actions:

Potential outward actions:

How do inward and outward actions interact and impact each other?

Are partnerships necessary for the desired impact?





Activity: checking design of potential contributions

Returning to the opening questions:

- In which ways do the designed actions support the core purpose of xyz organization?
- In which ways do the designed actions serve the internal and external stakeholders of xyz organization?
- What balance between costs vs. benefits (or challenge vs. opportunity) can be noticed for xyz organization in terms of “impact of hunger issues” upon this type of organization?
- How do the designed inward and outward actions cohere and create synergy for xyz impact?



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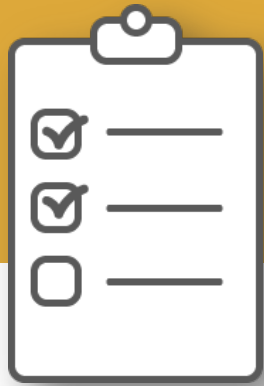
**Reflection and
resources
Learning activity**

Reflection and some resources

- Who in your circle of friends, family, neighbors, colleagues might be suffering from hunger and/or malnutrition? What are their circumstances?
- What income is necessary for high-quality, organic food for a family of four in your region? Who can or cannot afford it?
- What is important to you in terms of healthy eating and exercise habits? How do you manage this on a day-to-day basis?
- Who are your role-models for a contemporary lifestyle?
- Where do you get your information?

Further Infos:

- [SDG definition of the UN](#)
- [Platform “Land schafft Leben”](#)
- [Sustainable handling of food](#)
- [Austrian eco-label and gastronomy](#)
- [Infos about nutrition from the WWF](#)
- [Zero Waste Myths \(BAM Magazine\)](#)
- [Platform “Markta”](#)
- [Platform “Too good to go](#)
- [Index of green restaurants in Austria](#)
- [SDG Report 2021](#)



Activity: SDG journey

- > Put your SDG glasses on and observe your environment under the SDG 2 umbrella for a week and find evidence for underweight, malnutrition and overweight and measures to mitigate these problems. What circumstances lead to these issues?
- > If appropriate and allowed, take pictures of the found circumstances and catalogue the photos (begin making a scrapbook) — they will lead to a final assignment at the end of the series. Before you venture out, it might be a good idea to inform yourself about legal responsibilities when taking photos of people: oesterreich.gv.at (If you are not in Austria, look for the regulations of the respective country!)

Possible resource for online scrapbook (free for classrooms and non-profits): canva.com



"Do you know 3 friends or colleagues or neighbors who suffer from obesity? What are their stories? How did they get this way?"



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Sources

Slide 3:

- <https://germanwatch.org/en/node/14072> (download Arbeitsblätter)

Slide 4:

- <https://www.who.int/news-room/fact-sheets/detail/malnutrition>

Slide 5:

- <https://www.who.int/news-room/fact-sheets/detail/malnutrition>
- <https://www.ifm.org/news-insights/micronutrient-malnutrition-not-limited-developing-nations/>

Slide 6:

- <https://www.bbc.com/news/magazine-19743173>
- <https://www.who.int/news-room/fact-sheets/detail/malnutrition>
- <https://www.oecd-ilibrary.org/sites/7402dbb2-en/index.html?itemId=/content/component/7402dbb2-en>

Slide 7:

- <https://www.ifpri.org/publication/concept-global-hunger-index-0>
- <https://www.globalhungerindex.org/about.html>

Slides 8 + 9:

- <https://www.un.org/sustainabledevelopment/education/>
- <https://www.renn-netzwerk.de/nord/materialien>
- <https://www.bundestkanzleramt.gv.at/themen/nachhaltige-entwicklung-agenda-2030.html>
- <https://www.un.org/sustainabledevelopment/education/>

Slide 11:

- <https://unstats.un.org/sdgs/report/2020/The-Sustainable-Development-Goals-Report-2020.pdf>
- <https://unstats.un.org/sdgs/report/2021/>

Slide 12:

- <https://ec.europa.eu/eurostat/de/web/sdi/indicators>
- <https://ec.europa.eu/eurostat/de/web/sdi/zero-hunger>

Slide 13:

- https://sustainabledevelopment.un.org/content/documents/26511VN_R_2020_Austria_Report_English.pdf
- https://ec.europa.eu/eurostat/databrowser/view/hlth_ehis_bmi/default/bar?lang=en
- https://www.bmk.gv.at/themen/klima_umwelt/agenda2030/bericht-2020.html
- <https://www.bundestkanzleramt.gv.at/themen/nachhaltige-entwicklung-agenda-2030/implementierung.html>

Slide 14:

- <http://www.uninetz.at/perspektivenbericht>
- https://ec.europa.eu/eurostat/statistics-explained/index.php/Overweight_and_obesity_-_BMI_statistics#Education_level_and_obesity

Sources

Slide 17:

- https://www.meinbezirk.at/josefstadt/c-lokales/studie-des-oeaie-schule-koennte-ernaehrungsverhalten-der-kinder-deutlich-positiv-beeinflussen-und-uebergewicht-verhindern_a1500505
- https://www.renn-netzwerk.de/fileadmin/user_upload/nord/docs/materialien/RE_NN_Leitfaden_SDG_3_Nachhaltige_Ernaehrung_web.pdf
- https://www.unesco.at/fileadmin/Redaktion/Publikationen/Publikations-Dokumente/2017_Education_for_SDG.pdf

Slide 19:

- https://www.gemeindebund.steiermark.at/fileadmin/user_upload/Aktuelles/2019/Agenda_2030__SDGs_/SDG_Broschu__re_Gemeinden_195014.pdf

Slide 21:

- <https://info.bmlrt.gv.at/themen/lebensmittel>

Slide 22:

- <https://sdgcompass.org/>
- <https://toogoodtogo.at/de-at>

Slide 26:

- <https://www.un.org/sustainabledevelopment/hunger/>
- <https://www.landschafttleben.at/>
- <https://www.wien.gv.at/umweltschutz/nachhaltigkeit/lebensmittel-nachhaltig.html>
- <https://www.umweltzeichen.at/de/tourismus/gr%C3%BCne-gastronomie>
- <https://www.wwf.at/de/ernaehrung/>
- <https://bam-magazin.at/zero-waste-mythen/>
- <https://markta.at>
- www.toogoodtogo.at
- <https://www.greenpearls.com/de/restaurants/f/locations/oesterreich/>
- <https://unstats.un.org/sdgs/report/2021/>

Slide 27:

- https://www.oesterreich.gv.at/themen/bildung_und_neue_medien/internet_und_handy_sicher_durch_die_digitale_welt/7/Seite.1720440.html
- <https://www.canva.com/>

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- http://pixabay.com/de/service/terms/#download_terms