2.1.1 — Nutrition



TASK Framework: Human Welfare \rightarrow Dom	rain: Safety & Basic Needs \rightarrow Subject: 2.1.1. – Nutrit	tion		Click here for User Guidelines
	n, including undernutrition (wasting or stunting), inadequat velopment, directly or indirectly linked to all the SDGs. The g		-	
Social Foundation Illustrative Indicator: The social percentage of the population undernourished. (Ray		Social Foundation Status: Using data for 2016, it is estiundernourished. (Raworth, FAO, 2017)	imated that a	pout 11% of the global population is
Key Ideas6. Food market dominated by rich countries1. Principles of nutrition6. Food market dominated by rich countries2. Food systems7. Environmental impact of food production3. Nutrition-related health issues8. Food diets and consumer behaviors4. Persistent food insecurity in a self-sufficient world9. Food loss and waste5. Governance, regulations, and political Issues10. Strategies for sustainable nutrition		Key International Regulatory Initiatives • Food and Agriculture Organization (FAO) • World Health Organization (WHO) • The Global Compact on Nutrition • World Food Program (WFP) • UN Nutrition		
 Principles of nutrition Nutrition: basic concepts and terms, importance in human health and well-being Nutrients: macronutrients, micronutrients, and trace elements Characteristics of a healthy diet 	 2. Food systems Traditional and industrial farming methods Global food commodity trade and speculation Global food supply chains Intensive vs extensive (animal) farming 	 3. Nutrition-related health issues Hunger: prevalence, distribution Undernutrition: impacts on health and development Malnutrition: different forms and worldwide trends Obesity: rise globally, associated health risks Child condition: stunting, wasting, overweight, obesity 	 world Sufficient g (food dese Food insec phenomen Food sover 	urity and famines, as social and political a
 5. Governance, regulations, and political issues Land and property rights Land concentration Agrarian reforms International organizations (FAO) and programs Embezzlement of international aid Food used as Green Weapon in a conflict 	 6. Food market dominated by rich countries Globalization and market competition: technical advances of rich countries outcompete local agriculture in southern countries Integration of agriculture in the agribusiness chain: multi-national companies playing influential roles Volatility and rising trends in food prices: Food riots Subsistence vs industrial agriculture, land grabbing Inequalities in public support: greater Western subsidies for export agriculture than for development aid 	 7. Environmental impact of food production Green revolution and the intensification of food production Footprint: ecological and carbon footprints Land-change use (deforestation, soil degradation) Water pollution Impacts of intrants (novel entities) GHG emissions (animal farming in particular) Biodiversity and animal welfare Impact of climate change on food systems GMOs: controversy, biodiversity impact Palm oil: food, shampoo, cosmetics, deforestation 	 Meat: Healt Plant-base Food and a sense of pl Strategies eating hab Impact of g consumer 	or promoting healthy and sustainable its, food safety and hygiene global food markets on diets and behaviors local" food movements
 9. Food loss and waste Loss in production (≈ half of total waste) Loss and waste in retail Loss and waste in consumption Differences by type of food (vegetables, meat) Environmental consequences: water/energy waste, pollution, useless land-change GHG emissions (3rd largest emitter as a country) Prevention and valorization: collection issues, composting 	 10. Strategies for sustainable nutrition Prospects: need for increase in sustainable food production (and decrease in unsustainable production) Organic farming, permaculture, agroforestry Conversion of pasturelands: eating less meat Potential of technological innovations: vertical farming, lab-grown meat, insects Urban farming Seed biodiversity and ownership: its role in sustainable agriculture and food security Climate-resilient agriculture 			

Learning Objectives – Nutrition

Knowledge Type	The sustainability literate learner will be able to
Definitions Descriptive knowledge	 Define undernutrition, malnutrition, wasting and stunting and identify key corresponding characteristics Identify the groups most vulnerable to undernutrition Explain the principles of sustainable nutrition Distinguish food loss from food waste Identify and explain the sustainable development targets for global hunger
Current State & Trends Contextualized knowledge	 Determine human's current location vis-à-vis the sustainable development targets for global hunger Estimate past, recent, and current population, especially children, exposed to malnutrition, stunting and wasting Estimate the prevalence and the repartition of obesity and related health issues Identify current challenges to eradicate undernutrition and malnutrition Determine the relation between diets and wealth Identify the geographical and social disparities of hunger
Major Causes Causal knowledge	 Identify the direct causes of undernutrition, malnutrition, stunting, and wasting Identify the underlying drivers of undernutrition, malnutrition, stunting, and wasting Articulate the concept of food sovereignty with global food trade Estimate the percentage of food production lost and wasted Identify current issues with food aid Identify major actors contributing to-or resisting-undernutrition
Systemic Impacts Integrated knowledge	 Identify health consequences of malnutrition and associated deaths Estimate the carbon and the ecological footprints of diets and food loss Identify systemic interactions between education, gender, and undernutrition

Key Resources – Nutrition

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IPES-Food & ETC Group. (2021). A Long Food Movement: Transforming Food Systems by 2045. Retrieved from https://www.ipes-food.org/_img/upload/files/LongFoodMovementEN.pdf

Nestle, M. (2013). Food Politics: How the Food Industry Influences Nutrition and Health. University of California Press.

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2.1.2 – Health



TASK Framework: Human Welfare \rightarrow Domain: Safety	& basic needs → Subject: 2.1.2 - Health		Click here for User Guidelines
Definition: "Health is a state of complete physical, mental, and s	ocial well-being and not merely the absence of disease or i	nfirmity." (WHO, 2023)	
Social Foundation Illustrative Indicators: The social foundation 1) the population living in countries with under-five mortality rate the population living in countries with life expectancy at birth of	e not exceeding 25 per 1,000 live births, and 2)	Social Foundation Status: Currently, 46% of 1 under-five mortality rate exceeding 25 per 1,6 population living in countries with life expected (Raworth, 2017)	000 live births in 2015. Similarly, 39% of the
Key Ideas6. Global health challenges1. Health: definitions and determinants7. Health systems and access2. Mental health7. Health systems and access3. Disability rights and care8. Medical staffing and understaffing4. Ageing population considerations9. Health access disparities5. Pandemic and infectious diseases10. Pharmaceutical industry and research		Key International Regulatory Initiatives World Health Organization (WHO) UNESCO Department of Economic and Soc 	ial affairs
 Health: definitions and determinants Biological: genetics, age, sex Behavioral: hygiene, lifestyle, substance use, diet, sedentariness issues Social: socioeconomic status, education, social support Environmental: pollution, climate change, access to clean water and sanitation Life expectancy, Healthy life years Quality of life and well-being 	 2. Mental health Risk factors: biological, socioeconomic, stress Prevention, promotion, and quality of mental health services Impacts of environmental degradation and climate change: eco-anxiety, solastalgia Addressing misinformation about mental healthcare Trauma-Informed Healthcare 	 3. Disability rights and care Ableism Disability rights: from social attitudes to legal frameworks Health care coverage for people with disabilities 	 4. Ageing population considerations Demographic trends and implications Elderly care: retirement/care/nursing home Health and social systems adaptation Socio-economic consequences Silver economy
 5. Pandemics and infectious diseases Origins: zoonotic diseases, changes in human-animal interactions Infectious disease Transmission Pandemic preparedness and response Socio-economic impacts Vaccination and immunity, equitable distribution Climate change impacts: melting permafrost COVID-19: global impacts and lessons learned 	 6. Global health challenges Global pandemics and infectious diseases (including emerging diseases): Malaria, AIDS, Ebola Communicable and non-communicable diseases Maternal and child health, including mortality issues Birth control Antimicrobien Resistance (AMR) Vaccine controversies, health-related conspiracy theories Global health governance 	 7. Health systems and access Ensuring equitable health access and health care coverage Quality and safety of healthcare services Privatization of healthcare services Misinformation about healthcare Health policies and laws Cultural approaches: traditional, indigenous, alternative, eastern, and western 	 8. Medical staffing and understaffing Global Shortage of Healthcare Workers Impact of burnout and stress Women's representation in healthcare Medical missions Humanitarian aid Self-medication Emerging trends: digital therapeutics, Al
 9. Health access disparities Medical desert: lack of healthcare providers, geographic isolation, limited transportation Economic Factors: low income, lack of insurance, high healthcare costs Educational Disparities: health literacy, awareness of resources Environmental Injustice: housing conditions, exposure to pollutants, neighborhood safety Systemic Bias and discrimination Gender disparities: reproductive health access, preventive care, mental health stigma 	 10. Pharmaceutical industry and research Structure, key players, global reach of the pharmaceutical industry Role of Research & Development (R&D) Ethical Issues in Research: clinical trials, animal testing, use of genetic information Pharmaceutical lobbying, impact on health policy and patient care Access to medicines: drug pricing, patents, generic drugs 		

Learning Objectives – Health

Knowledge Type	The sustainability literate learner will be able to
Definitions Descriptive knowledge	 Define and differentiate health, hygiene, and well-being Identify the diversity of philosophical conceptions of life quality, including the right to health, and discriminatory attitudes against illness like ableism Define and distinguish different types of health and diseases such as communicable disease or mental health Identify health quality variables such as maternal mortality, child mortality, or life expectancy identify the sustainable development targets for health
Current State & Trends Contextualized knowledge	 Determine human's location vis-à-vis the related sustainable development targets Describe past, current, and predictable trends of major global health issues Identify current challenge to address major health issues such as obesity, mental health, or emergent diseases Determine gender, social and geographical health disparities
Major Causes Causal knowledge	 List the main direct causes of health issues by types of illness List the underlying drivers of health issues such as sedentariness Explain the relation between clean water and health, especially in health care facilities Identify major actors and main strategies to address -or aggravate- health issues
Systemic Impacts Integrated knowledge	 Identify (and estimate) major consequences of health issues, such as the cost of mental health issues Identify the leading causes of Years Lived with Disability Describe the systemic interactions between health and education, especially in the case of global health crises Describe and estimate the relations between global pandemics and mental health

Key Resources – Health

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2.1.3 – Access to Water and Sanitation



TASK Framework: Human Welfare → Domain: Safety and Basic Needs → Subject: 2.1.3 – Access to Water and Sanitation				Click here for User Guidelines
	ccess to sufficient, safe, acceptable, physically accessible res of life, that is safe, hygienic, secure, and socially and cu	•	0	,
Social Foundation Illustrative Indicators: The social four determined by two control variables: 1) the percent of population without access to improve	pulation without access to improved drinking water,	Social Foundation Status: Stocks of freshwater remo numerous water basin areas are operating beyond the 2015) However, billions of people live without safely m	he zone of unc	ertainty and high risk. (Steffen,
 Access to water Drinking water Sanitation and hygiene 	 Freshwater use and misuse Water recycling Wastewater management Water resource management Water and sustainable development 	Key International Regulatory Initiatives• Convention on the Protection and Use of Transbou• General Comment No. 15 (2002) The right to water• Human Rights Council Decision 2/104 - Human Rigi• Intergovernmental Panel on Climate Change (IPCC• UN Framework Convention on Climate Change-UN• IPCC Sixth Assessment Report (AR6) 2021-2023	(arts. 11 and 12 hts and Access C) 1988	of the ICESCR)
 I. Global water cycle and freshwater Hydrological cycle, systems, and processes Freshwater resources and supply Surface water / groundwater Scarcity: drought, shortages, restrictions, rationing Abundance: floods, flash floods, soil erosion, landslides Freshwater stress (water stress, water crisis) Proportion of freshwater to salt water Proportion of accessible freshwater to freshwater stock 	 2. Access to water Water as a basic need, human right, and common good Principles of access: available, accessible, equitable, affordable, safe, gender equality, adequate, universal Unequal access to safe drinking water Disparities between rich and poor Water distribution Transboundary water (access, regulation, conflict, etc.) Water exports 	 3. Drinking water Ambient water quality Basic drinking water Potable and non-potable water Safely managed drinking water services Improved water source Water quality standards Pollution types, sources, causes, impacts, etc. Pesticide and herbicide contamination Water pollution impact on health (fauna and flora) 	 Basic sanit Safely mar Sanitation Improved s Principles a accessible equality, ac Open defe Handwash 	aged sanitation services facilities management sanitation facilities of sanitation and hygiene: available, equitable, affordable, safe, gender dequate, universal
 5. Water use efficiency Water exports (virtual water) Water harvesting Water leakage Agricultural water productivity Water sprinkling and evaporation Water storage Irrigation and micro-irrigation 	 6. Freshwater use and misuse Conflict between human use and ecosystem health Irrigation Excessive extraction for agricultural use (Overdrafting) Water use by sector Degradation and/or depletion of aquifers, groundwater, lakes, rivers, wetlands, reservoirs Water rights (patents, regulations, treaties, boundary water, etc.) 	 7. Water recycling Water reuse technologies Desalination Safe water reuse Water programs Water harvesting Water desalination Water farming 		wastewater er generation er collection wastewater er monitoring I plants
 9. Water resource management Water management programs (multiple types) Sustainable water resource management Integrated Water Resource Management (IWRM) Transboundary water cooperation (river / lakes) Water assistance programs (for developing countries) Community engagement and participation in water management Role in global, systemic interrelationships 	 10. Water and sustainable development Key role water plays in achieving other SDGs Water and gender Water and inequality Water and health Water and cities Water and energy Water and food security Water and the economy and jobs 			

Learning Objectives – Access to Water and Sanitation

Knowledge Type	The sustainability literate learner will be able to
Definitions Descriptive knowledge	 Explain the meaning of freshwater use and describe the key characteristics of the phenomenon Describe the multiple types and characteristics of freshwater use and freshwater poverty Characterize the importance of access to freshwater to life, human welfare, and Earth systems Describe the natural cycles, processes, distribution, sources, and proportion to total water on Earth of freshwater resources Identify multiple types of health-related services and ecosystem services provided to humans by freshwater resources Identify and explain the control variable used to establish the Planetary Boundary for freshwater use
Current State & Trends Contextualized knowledge	 Determine humanity's current location vis-à-vis the Planetary Boundary for freshwater use Explain the role that freshwater plays in supporting ecosystems, habitats, and biodiversity Estimate past, current, and projected freshwater needs, and corresponding available resources Identify countries and/or regions that are particularly rich in freshwater resources and/or vulnerable to water poverty or water quality Identify and describe impediments to respecting the Planetary Boundary on freshwater use as well as the stakes of transgressing it
Major Causes Causal knowledge	 Identify and rank the main causes of freshwater use, misuse, and water quality deterioration Identify and rank the underlying structural drivers of freshwater deterioration by economic sector Explain the factors and processes leading to increased demand for freshwater List the major causes of water stress, declining water quality, and the deterioration of water-related ecosystems Identify major local, state, and non-state actors and the role each plays in contributing to preserving or depleting freshwater resources
Systemic Impacts Integrated knowledge	 Identify and evaluate the major consequences of respecting or transgressing the Planetary Boundary for freshwater use Identify and evaluate the consequences of disrupting natural water cycles and freshwater resources Identify the multiple hazards and consequences of freshwater loss for both Earth's regulating systems and human welfare systems Categorize the hazards of freshwater loss into immediate, mid-term, and long-term threats to human well-being and ecosystem stability Imagine and describe the risks and worst-case scenarios stemming from the decline of freshwater resources

Key Resources – Access to Water and Sanitation

IPCC. (2021). Climate Change 2021: The Physical Science Basis. Contribution of WG1 to the Sixth Assessment Report of the IPCC. Retrieved from https://www.ipcc.ch/report/ar6/wg2/downloads/report/IPCC_AR6_WGI_SPM.pdf IPCC. (2022). Climate Change 2022: Impacts, Adaptation, and Vulnerability. Contribution of WG2 to the Sixth Assessment Report of the IPCC. Retrieved from https://www.ipcc.ch/report/ar6/wg2/downloads/report/IPCC_AR6_WGII_SummaryForPolicymakers.pdf IPCC. (2022). Climate Change 2022: Mitigation of Climate Change. Contribution of WG3 to the Sixth Assessment Report of the IPCC. Retrieved from https://www.ipcc.ch/report/ar6/wg2/downloads/report/IPCC_AR6_WGII_SummaryForPolicymakers.pdf IPCC. (2023). Climate Change 2022: AR6 Synthesis Report. Climate Change. Retrieved from https://igcc.ch/report/ar6/wg1/ SDGs: The 17 Goals, 169 targets, overview, indicators, progress & info. Retrieved from https://igdgs.un.org/goalsThe Sustainable Development Goals Report 2022. Retrieved from https://unstats.un.org/sdgs/report/2022/. UNESCO. (Full report). Learning Objectives & Discussion Topics. Retrieved from https://unesdoc.unesco.org/ark/48223/pl000247444 United Nations. (2021). The United Nations World Water Development Report 2023: Partnerships and Cooperation for Water. UNESCO, Paris. Retrieved from https://unesdoc.unesco.org/ark/48223/pl0000375724 United Nations. (2021). The United Nations World Water Development Report 2022: Groundwater: Making the invisible UNESCO, Paris. Retrieved from https://unesdoc.unesco.org/ark/48223/pl0000375724 UNIECC. (2020). United Nations World Water Development Report 2021: Valuing Water: UNESCO, Retrieved from https://unesdoc.unesco.org/ark/48223/pl0000375724 UNESCO. (2020). United Nations World Water Development Report 2020: Water and Climate Change, Paris, UNESCO. Retrieved from https://unesdoc.unesco.org/ark/48223/pl0000375724 UNESCO. (2020). United Nations World Water Development Report 2020: Water and Climate Change, Paris, UNESCO. Retrieved from https://unesdoc.unesco.org/ark/482



2.1.4 – Housing and Human Settlements



TASK Framework: Human Welfare → Domo	<u>Click here for User Guidelines</u>				
	d be seen as the right to live somewhere in security, peac ction, see UN Habitat Factsheet 21 on the Right to Adequa		cts of the right to adeque	ate housing, including freedoms,	
Social Foundation Illustrative Indicator: The social determined by the proportion of global urban popul (Raworth, 2017A)	foundation for housing and human settlements is lation living in slum housing in developing countries.	Social Foundation Status: In 2012, 24% of global u developing countries. This shortfall continues toda			
Key Ideas1. Physical, social, & psychological human needs7. Disaster preparedness and resilience2. Urbanization8. Sustainable communities3. Settlement patterns9. Sustainable construction and planning4. Waste generation and management10. Sustainable transportation5. (Forced) Displacement and migration11. Sustainable housing6. Informal settlements		 Key International Regulatory Initiatives UN - Habitat UNHCR -UN Refugee Agency 1951 Refugee Convention Human Rights Watch Amnesty International 			
 Physical, social, & psychological human needs Varying definitions of human needs Physical human needs (shelter, food, etc.) Social needs (community, etc.) Psychological (safety, etc.) Housing as the basis for the fulfillment of human needs 	 2. Urbanization Population growth following green revolution Rural exodus Labor migration Artificialization of soils Residential segregation 	 3. Settlement patterns Urban, rural, peri-urban, diversity of patterns Land occupation rate Population density Growing inequalities in urban-rural Regional development / Rural development 	• Recycling, reusing, c	-	
 5. (Forced) Displacement and migration Forced evictions Conflict, wars Land grabbing, land planning Asylum (rights), refugees, climate refugees Stateless people 	 6. Informal settlements Conditions of adequate housing UN-Habitat Barriers to access to physical, social, psychological human needs Healthcare: disease, lack of sanitation, hygiene Refugee camps Social exclusion risks, crime, criminalization of poverty 	 7. Disaster preparedness and resilience Natural disaster preparedness and resilience Resilient buildings Climate catastrophes Vulnerabilities: coastlines, slums, etc. 	8. Sustainable commu Community dynam Social needs, social Democratic process Multi-stakeholder p Food sovereignty/se Access to culture, en	ics exclusion, loneliness ses, participative methods rocesses, cooperation ecurity	
 9. Sustainable construction and planning SDGII Targets and indicators Bio-based construction, circular building, material reuse Integral planning Retrofitting urban spaces Democratic, inclusive (city) planning processes 	 10. Sustainable transportation Integrated, affordable transportation systems Carbon neutral transportation systems Air pollution and air quality Mobility Freight transportation systems 	 11. Sustainable housing Alternative housing structures: co-living 15-minute cities Eco-villages, eco-neighborhoods Tiny houses, natural housing Urban agriculture 			

Learning Objectives – Housing and Human Settlements

Knowledge Type	The sustainability literate learner will be able to
Definitions Descriptive knowledge	 Define basic human needs, particularly needs related to the issues of Housing and Human Settlement, and how shelter (structures) is a gateway to the fulfilment of other needs Define and distinguish between distinct groups deprived of housing and human settlement and in what way their deprivation leads to unmet needs Define resilient human settlement and describe what processes contribute to their resilience Describe major processes influencing the sustainability of human settlements: food, energy, transportation, construction, water, safety, waste treatment, inclusion and accessibility, education, integration of green spaces, disaster risk reduction, political @decision-making and participation, community dynamics Identify and argue for sustainable and inclusive planning of human settlements across the major processes
Current State & Trends Contextualized knowledge	 Estimate & describe the historical and current trends for settlements patterns (urbanisation, rural exodus, large movements of populations) and their impact on the settlements' sustainability Estimate the current and predictable trends in demographics deprived of their human settlement-related needs Estimate the role and impact of urban settlements worldwide on the major processes influencing the sustainability of human settlements Identify current good practices of sustainable human settlements
Major Causes Causal knowledge	 List the major causes behind unsustainable human settlement patterns (war, natural disasters, inequality,) Argue the main drivers of unsustainable human settlements across the major processes at play Identify key actors to address the unsustainability of human settlements
Systemic Impacts Integrated knowledge	 Explain the role of local decision-makers, of public governance and the importance of inclusive participation Identify key characteristics of communities and their dynamics that participate in furthering the sustainability of human settlements and give examples of local initiatives

Key Resources – Housing and Human Settlements

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2.1.5 — ACCESS TO ENERGY



TASK Framework: Human Welfare → □	Domain: Safety and Basic Needs → Subject: 2.1.5 -	Access to Energy		Click here for User Guidelines
Definition: Access to energy is understood to r access to network. (<u>UN, SDG 7</u>)	nean "that all people have access to affordable, reliable, sus	stainable, and modern energy" for the basic human ne	eds of home lig	hting, cooking, heating, cooling, and
	ocial foundation for access to energy is determined by the ctricity and to clean cooking facilities. (Raworth, 2017)	Social Foundation Status: Today, 675 million people with unsafe and polluting fuels. This constitutes a sho	•	nected to the grid and 2.3 billion still coc
Key Ideas7.Renewable energyKey International Regulatory Initiatives1.Global carbon cycle8.Energy efficiencyIAEA—International Atomic Energy Agency (UN, 1957)2.Non-renewable fossil fuel energy9.Energy policyIEA—International Energy Agency (OECD-1974)3.Fossil fuel impacts: Earth systems10.Energy transitionECT—Energy Charter Treaty (1994)4.Fossil fuel impacts: Human welfare11.Energy politicsIntergovernmental Panel on Climate Change (IPCC) 19885.Energy use and consumption12.Energy and the SDGsUN Framework Convention on Climate Change-UNFCCC (1994)6.Energy use and consumptionIPCC Sixth Assessment Report (AR6) 2021-2023				
 I. Global carbon cycle Foundation of life on Earth Main gases: Carbon dioxide (CO₂), Methane (CH₄) Main solids/liquids: coal, oil, shale (i.e., fossil carbon) Earth carbon cycles: atmospheric, terrestrial, oceanic Fast and slow carbon cycles Carbon sinks / stocks / pools / reservoirs Photosynthesis / Greenhouse effect Carbonic acid / Ocean acidification 	 2. Non-renewable fossil fuel energy Fossil fuel energy sources: coal, oil, natural gas Energy extraction: principles, practices, impacts, techniques, and technologies Coal mining, strip-mining Petroleum and gas extraction (fracking) Hydrocarbons / Derivatives Kerosene, ethanol, methanol, etc. Liquified petroleum / natural gas Tar and oil sands Fossil fuel reserves / Peak oil 	 3. Fossil fuel impacts: Earth systems Climate change via CO₂ emissions Ocean acidification via carbon absorption Air pollution via extraction, refining, distribution, use Acid rain (sulfuric and nitric acids) Oil spills from shipping and offshore drilling Methane leakage Fugitive gas emissions Fracking (Hydraulic fracturing) 	 Respective Respiratory Danger of the Health imp 	unsustainable energy acts of dirty energy pollution (via coal, charcoal, wood, crop g)
 5. Energy access Principles: clean, safe, affordable, reliable, sustainable, modern, universal Domestic energy needs: lighting / cooking / heating / cooling Access to safe, clean cooking fuels, facilities, and technologies Energy security Energy poverty vs. fuel poverty 	 6. Energy use and consumption Primary energy type used by region Energy security / insecurity Global energy mix Total final energy consumption Total renewable energy consumption The "Energy Ladder" Type of energy used by level of income Energy supply and demand (cost, price) Electricity production by source 	 7. Renewable energy Sustainable energies Waterpower: Hydropower, wave, tidal, marine Geothermal Nuclear Solar Wind Bioenergy via biomass and biofuels Hydrogen energy and fuels 	 Global prin total energy Energy suff Rebound e Innovative Energy sup 	
 9. Energy policy Role of policy in energy access and use Cross-border partnerships and conflicts Energy production strategies: Centralized vs. LESCOs local energy supply companies Importance of technology transfers Energy mix -local, national, & global level Improved energy sources Energy Development Index (EDI) 	 10. Energy transition Role of states & governments in energy structures / policies Bridge energies / "Just transition" Eco-impacts of zero- and low-carbon energy Low-carbon energy (nuclear, hydroelectricity) Emerging energy technologies Critical minerals and metals ICE (internal combustion engine) and battery powered cars Fossil fuel phase-out 	 11. Energy politics Energy and GDP Energy linkages to political power / Fossil fuel lobby Fossil fuel subsidies Petrochemical industry / Big oil Energy markets Fossil fuel divestment Energy activism (e.g., Just Stop Oil, Extinction Rebellion) Stranded assets 	 Energy pov Role of sus development 	rerty and gender rerty and inequality tainable energy for sustainable

Learning Objectives – Access to Energy

Knowledge Type	The sustainability literate learner will be able to
Definitions Descriptive knowledge	 Describe the multiple types, origins, and mix of energy resources—both renewable and non-renewable—used by humans from past to present, and in various regions List the advantages and disadvantages of each category of energy (i.e., impacts on human health, local ecosystems, and global climate) Define key concepts in human energy use such as energy security, energy efficiency, bridge energy, local energy (LESCOS), peak oil, low carbon energy, renewable energy, etc. Identify the principal types, benefits, and drawbacks of innovative and emerging technologies Describe the principal international and regulatory efforts to manage energy needs and reserves and to provide equitable and sustainable access for all
Current State & Trends Contextualized knowledge	 Identify and describe the principal opportunities for, and impediments to energy security for both human and commercial activity Categorize the many types, sources, and impacts of energy technologies and mismanagement Describe structural barriers and inequalities vis-à-vis access to clean and sustainable energy Assess the effectiveness of local, state, and international authorities in managing energy security for all Identify the principal strategies for conserving and managing energy under incrementally intense levels of climate change
Major Causes Causal knowledge	 Identify structural and practical impediments to accessing to clean and renewable energy by individuals, businesses, and states Identify the multiple forms and sources of human-generated pollution due to energy exploration, extraction, distribution, and use Describe the nature and challenges of energy use efficiency, energy regulation and management, transboundary energy cooperation, and access by developing countries Discuss to what extent humans engage in responsible production, consumption, and waste management to minimize fossil fuel use and to favor renewable energies Assess the role of corporate, state, and intergovernmental actors in regulating and monitoring current energy structures, policies, and processes
Systemic Impacts Integrated knowledge	 Identify the role energy and energy markets (both renewable and non-renewable) play in framing global interrelationships and responding to the challenges of climate change Assess the impact energy sufficiency and energy scarcity have on human health, food security, and socioeconomic processes Describe the short-term and long-term effects current energy use patterns have on human health, ecosystem sustainability, and global climate change Imagine and describe the risks and worst-case scenarios stemming from continued use of carbon-based fossil fuel energies compared to zero and low-carbon energies Describe the impact on biodiversity from excessive use and misuse by humans of Earth's energy resources

Key Resources — Access to Energy

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Raworth, K. (2017). A Doughnut for the Anthropocene: humanity's compass in the 21st century. Lancet Planet Health, 1, e48 – e49. <u>https://www.thelancet.com/cms/10.1016/S2542-5196(17)30028-1/attachment/2d58fdae-741c-</u> 4016-84cd-2fc0ble94f49/mmc1.pdf

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2.2.1 – Basic Income and Decent Work



TASK Framework: Human Welfare \rightarrow Domain: So	ocial Welfare → Subject: 2.2.1 – Basic In	come & Decent Wor	'k		Click here for User Guidelines
Definitions: Basic Income: "An income support mechanism women and men to obtain decent and productive work in a				." (<u>IMF, 2018</u>). Decer	t Work: "The opportunity of
Social Foundation Illustrative Indicator: 1 - Population living on less than the international poverty li 2 - Proportion of young people (aged 15-24) seeking but no		Raworth 2017); 2)In 2	tatus: global population lived below the inte .014, 13% of young people (aged 15-24 constitutes a shortfall.		
Key Ideas 5. 1. Structure of poverty 5. 2. Work and employment 6. 3. Labor market trends and challenges 7. 4. Social protection: systems, limitations, and reforms 8. 5. Universal Basic Income 9. 10	Economic impacts of redistributive policies Social and psychological impacts of basic income Basic income and inclusion Productivity and automation: impacts on work and		Key International Regulatory Initia • International Labor Organization • World Bank, IMF: Economic Policie	: Standards, Conve	
 Structure of poverty Absolute, relative, and multidimensional poverty Poverty measures: income-based, consumption-based, human development index Poverty alleviation strategies: conditional cash transfers, microcredit, social pensions Poverty and employment: informal labor, low wages, job insecurity Poverty traps: lack of education, health issues, debt cycles Poverty and discrimination: gender, race, caste, disability 	 Work and employment Employment opportunities: job creation, unemployment, underemployment Precarious work: informal economy, gig economy, and working poor Non-remunerated work: care work, volunteer work, reproductive labor Social dialogue and tripartism: employee rights, collective bargaining, unionism Decent work policies: minimum wage laws, labor rights protections, workplace safety regulations 	 employment types Globalization and warding and the migration Income inequality & i job quality: working a good the migration Skill mismatch: overeand up-skilling Meaningful jobs vs bood the migration 	and challenges I and supply of labor, wage levels, ork: offshoring, outsourcing, labor wage stagnation (causes, impacts) conditions and rights, job stability education, undereducation, re-skilling, ullshit jobs: perception of work, job see morale, work culture, green jobs, great	 Social insurance health insurance Social assistance housing assistance Strength-based poverty Effectiveness and protection: cover 	e and welfare services: cash transfers, nce, food stamps vs. Deficit-based methods against d limitations of traditional social rage gaps, welfare traps ial protection systems: universal vs.
 5. Universal Basic Income Key principles: universality, unconditionality, individuality, periodicity Types of basic income: universal, negative income tax, etc. Basic Income and Human Rights: Right to a decent life Philosophical debates: conditionality, deservedness, freedom, and social justice Case studies: Alaska permanent fund, Finland, Namibia 	 6. Financing the welfare state Tax-based funding: progressive taxation, wealth taxes, financial transaction taxes Sovereign wealth funds: natural resources, public assets, state-owned enterprises Monetary policies, money creation 	predictions • Macroeconomic effe economic stability • Redistribution and in quintiles, gender gap	oly: empirical evidence, theoretical cts: aggregate demand, inflation, equality: Gini coefficient, income d development: human capital,	 Poverty reduction relative poverty Health and well- stress, and anxie Social cohesion of engagement, tru Empowerment a 	and civic participation: community
 9. Basic income and inclusion Women in the labor market: wage gap, maternity leave, part- time work Recognizing unpaid care work: housework, childcare, elder care Women's empowerment: economic independence, decision- making, time use Racial and ethnic disparities: employment discrimination, wage differences People with disabilities: inclusive employment, disability benefits 	 10. Productivity and automation: impacts on work and income Defining productivity: labor productivity, total factor productivity Impact of technological change on labor market: job displacement, skill-biased technical change Automation and job loss: risk assessment, economic and social consequences Automation regulation, Basic income as a solution to job loss due to automation: potential benefits, critiques 	 contradictory? Basic income as a rig counterarguments Basic income as an e exploitation, increase Decent work as a hur meaningful work 	enabler of decent work: reduced		

Learning Objectives – Basic Income and Decent Work

Knowledge Type	The sustainability literate learner will be able to
Definitions Descriptive knowledge	 Define and distinguish relative and extreme poverty and identify key corresponding bibliographical references Define and distinguish deficit-based and strength-based approach Identify characteristics and debates of the Universal Basic Income Define and distinguish formal and informal employment Determine the measures of basic income social foundation and the discussions related
Current State & Trends Contextualized knowledge	 Determine human's current location vis-à-vis the basic income social foundation Estimate past, recent, and current number of people exposed to extreme poverty Estimate current relative poverty lines according to the World Bank classification Describe the global distribution of poverty Determine if a country has already implemented a Universal Basic Income Describe the geographical and social determinants of unemployment
Major Causes Causal knowledge	 List the main direct causes of poverty List the underlying drivers of poverty Identify the relations between inequality and poverty Identify the reasons for recent interest in Universal Basic Income Identify the causes of unemployment Identify major actors contributing to—or resisting—the transgression of the basic income social foundation
Systemic Impacts Integrated knowledge	 Identify the poverty consequences on human rights and needs Enumerate the impacts of extreme wealth disparities Identify the implications of poverty regarding climate change vulnerabilities Describe the interactions between the Universal Basic Income and poverty Explain why informal employment contributes to poverty

Key Resources – Basic Income and Decent Work

Graeber, D. (2018). Bullshit Jobs: A Theory. Simon and Schuster.

International Labour Office. (2023). The road to decent work for domestic workers. Geneva. Retrieved from https://www.ilo.org/global/topics/domestic-workers/publications/WCMS_883181/lang--en/index.htm

Messerli, P., et al. (2019). Global Sustainable Development Report 2019: The Future is Now – Science for Achieving Sustainable Development. Retrieved from https://sdgs.un.org/sites/default/files/2020-07/247976SDR report 2019. Development Report 2019: The Future is Now – Science for Achieving Sustainable Development. Retrieved from https://sdgs.un.org/sites/default/files/2020-07/247976SDR report 2019. Development Report 2019: The Future is Now – Science for Achieving Sustainable Development. Retrieved from https://sdgs.un.org/sites/default/files/2020-07/247976SDR report 2019. pdf

Oxfam International. (2020). Time to Care: Unpaid and underpaid care work and the global inequality crisis. Retrieved from https://www.oxfam.org/en/research/time-care

Raworth, K. (2017). A supplement to A Doughnut for the Anthropocene: humanity's compass in the 21st century. Lancet Planet Health, 1, e48–49. <u>https://www.thelancet.com/cms/10.1016/S2542-5196(17)30028-1/attachment/2d58fdae-741c-4016-84cd-2fc0ble94f49/mmc1.pdf</u>

The Sustainable Development Goals Report 2022. (n.d.). Retrieved from https://unstats.un.org/sdgs/report/2022/

The Sustainable Development Goals Report 2022 – Extended Report – Goal 8 (Decent Work and Economic Growth). (n.d.). Retrieved from https://unstats.un.org/sdgs/report/2022/extended-report/Extended-Report_Goal-16.pdf

World Bank. (2019). World Development Report 2019: The Changing Nature of Work. Retrieved from https://www.worldbank.org/en/publication/wdr2019.

2.2.2 — SOCIAL EQUITY



	treatment of people. There is a normative componen such as income, wealth, and opportunity. (Raworth, 2		iality. (McSherry, 2013) In practice, social equity as a social	
Social Foundation illustrative indicator: Population (the ratio of the income share of the top 10% of peo	living in countries with a Palma ratio of 2 or more		012, 39% of the world population lived in countries above the 7a) This constitutes a shortfall.	
Key Ideas5. Right to land, property, and natural resources1. Dimensions of inequality5. Right to land, property, and natural resources2. (Relative) Poverty and extreme poverty6. Redistribution: taxes, policies, pensions.3. Development aid7. Diversity, equity, and inclusion4. Discrimination8. Structural inequality		 Key International Regulatory Initiatives Human Rights Declaration of 1948 Refugee Rights Declaration of 1951World Inequality Lab and Database Oxfam Novib UN-Department of Social Affairs: World Social Reports (yearly) 		
 I. Dimensions of inequality Economic, political, cultural, social, environmental, knowledge, spatial Access to sanitation, water, food, healthcare, education Interaction between dimensions: intersectionality Indicators for economic inequality: Gini, Palma Climate vulnerability and inequality 	 2. (Relative) Poverty and extreme poverty Relative poverty, trends Extreme poverty, trends Income inequality SDG I targets for 2030 Wealth, capital distribution between bottom and top 10%/50% 	 3. Development aid International development aid, history, and trends Global South / Global North divide (Neo-)colonialism Multi-stakeholder partnerships for equality 	 4. Discrimination Psychological origins of discrimination: biases, othering, prejudice Racial and Ethnic: Systemic racism, xenophobia, hate crimes Gender: sexism, gender pay gap, stereotypes Disability: ableism, accessibility issues, stigmatization Religious: intolerance, religious freedom, persecution Indigenous: land rights, cultural heritage, self-determination LGBTQ+: Homophobia and transphobia, equal rights, discrimination in healthcare Class (/caste) discrimination: income inequality, limited access to education, employment discrimination 	
 5. Right to land, property, and natural resources Native and Indigenous rights Threats to Indigenous population's rights Food sovereignty Commons, Commoning Natural resources privatization (water, mining, etc.) Land grabbing, forced evictions Ecocide 	 6. Redistribution: taxes, policies, pensions Social welfare Labor practices and standards Tax regimes and systems and their effects on inequalities Universal Basic Income Intergenerational equity Technology and inequality 	 7. Diversity, equity, and inclusion efforts DEI company policies DEI public policies Migrant and refugee rights Youth and children Rights Anti-racism, anti-fascism efforts Reconciliation Affirmative action 	 8. Structural inequality DEI company policies Access to capital (economic, cultural, human, social), social reproduction and unequal opportunities (privilege Global Trade Systems Colonization, Decolonization and Neo-colonialism Debt burdens Natural resources (Access) Regressive tax policies 	

Learning Objectives - Social Equity

Knowledge Type	The sustainability literate learner will be able to
Definitions Descriptive knowledge	 List, define and relate different dimensions of inequality (social, political, environmental, economic, spatial, cultural, knowledge) Define rights to land, rights to property, access to natural resources Define and express aspects of discrimination, diversity and inclusion, vulnerabilities
Current State & Trends Contextualized knowledge	 Quantify (in orders of magnitude) current inequalities globally List and argue different indicators for inequality and their relevance for decision-making Estimate amount of international development aid and its historical and current trends
Major Causes Causal knowledge	 Identify main drivers of inequality List and relate what local, national, and global economic and policy processes promote and hinder diversity: labour laws, fiscal policies, wages, social protection, corporate activities, global trade systems and regulation, tax regimes List and relate what local, national, and global social and political processes promote and hinder diversity: discriminations, diversity and inclusion efforts, reconciliation, rise of populism and neo-fascism Relate historical inequalities to current state and trends (including multi-national companies)
Systemic Impacts Integrated knowledge	 Identify and argue main leverage points for impact on social equity Identify and argue vulnerabilities rising from inequalities Describe systemic impact, effectiveness, and conditions of international development aid Identify and relate inequality with issues around access to education, right to food, peace and institutions, political voice Identify and argue the compounding effect of climate change on existing inequalities

Key Resources – Social Equity

Department of Economic and Social Affairs, UN. (2023). World Social Report 2023. Retrieved from https://www.un.org/development/desa/dspd/wp-content/uploads/sites/22/2023/01/2023wsr-fullreport.pdf. McSherry, M. (2013). What is Social Equity? Melbourne Social Equity Institute, Stories. Retrieved from https://socialequity.unimelb.edu.au/stories/what-is-social-equity Project Drawdown. (2022). Climate Poverty Connection Report. Retrieved from https://www.drawdown.org/publications/climatepoverty-connections-report?_ga=2.176715685.1273705501.1676368453-556305688.1674464263 Raworth, K. (2017). A Doughnut for the Anthropocene: humanity's compass in the 21st century. Lancet Planet Health, 1, e48–49. https://www.thelancet.com/journals/lanplh/article/PliS2542-51961730028-1/fulltext#sec1 Raworth, K. (2017a). A supplement to A Doughnut for the Anthropocene: humanity's compass in the 21st century. Lancet Planet Health, 1, e48–49. https://bity.ws/K3Uv SDGs: The 17 Goals, 169 targets, overview, indicators, progress & info. (n.d.). Retrieved from https://sdgs.un.org/goals Sustainable Development Solutions Network. (2022). The Sustainable Development Goals Report 2022. Retrieved from https://unstats.un.org/sdgs/report/2022/ World Bank. (2019). World Development Report 2019: The Changing Nature of Work. Retrieved from https://www.worldbank.org/en/publication/wdr2019 World Bank. (2022). Poverty and shared prosperity 2022: correcting course. Retrieved from https://openknowledge.worldbank.org/bitstream/handle/i0986/37739/9781464818936.pdf World Inequality Lab. (2022). World Inequality Report 2022. Retrieved from https://wir2022.wid.world/download/



2.2.3 — GENDER EQUALITY



TASK Framework: Human Welfare \rightarrow D	Subject: 2.2.3 – Gender	Equality	Click here for User Guidelines
benefitting from) economic, social, cultural and	o , , ,	t, and opportunities for realizing their full potential, human ric qual valuing by society of the similarities and the differences <u>Global Compact)</u>	
	cial foundation for gender equality is determined by the arliaments. For assessing inequalities in the economic ed on survey data from a diverse sample of 48	Social Foundation Status: The world is not on track to achi Global Gender Gap Report, women will achieve political an rate of progress.	
Key Ideas7. Gender-based sexual violenceKey International Regulatory Initiatives1. Gender identity8. Women's reproductive rights• Declaration of the Rights of Women and of the Female Citizen (1791)2. Principles of gender equality9. Women's reproductive rights• Declaration of the Rights of Women (ECOSOC), 19463. Forms of gender inequality9. Women's rights standards• UN Commission on the Status of Women (ECOSOC), 19464. Patriarchy10. Women's rights standards• Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW), 19815. Women, gender, and work11. Leveraging women in the community• UN Convention on the Rights of the Child (CRC), 1989/19906. Women, gender, and poverty• Beijing Declaration and Platform for Action (1995)			
Gender identity Historical, social, & cultural origins (past / present) Social and cultural construct of gender Traditional gender roles	2. Principles of gender equality Basic rights of women and girls Non-discrimination Political empowerment 	 3. Forms of gender inequality Gender gap Structural: embedded discrimination Political: under-representation, right to vote 	 4. Patriarchy Patriarchy / matriarchy Masculinity / femineity Hegemonic masculinity and types of masculinity
 Non-binary identities and issues (LGBTQQ etc.) Structural gender discrimination Intersectionality of gender (race, religion, identity) Forms of gender identity Root causes of gender inequality 	 Participation in decision-making Equal opportunity Access to education Labor-force participation Women's property rights 	 Economic: discrimination, exploitation, exclusion Cultural: language construction, stereotypes Social: marginalized voice Educational: access, lower return on investment Sexual: sexual rights, power 	 Toxic masculinity: concept, effects, controversies Virility and its values; masculinism Socialization through masculinity: emotional inhibition, aggressiveness and competitiveness, pressure for success, rewarding risk-taking
5. Women, gender, and work	Freedom from exploitation and violence 6. Women, gender, and poverty	Impacts on women of gender discrimination (multiple factors) 7. Gender-based sexual violence	Traditional masculinity and its effects on men's identity, health, suicide rates, etc. B. Women's reproductive rights
 Labor-force participation Employment discrimination Lower representation in STEM Unpaid formal and informal work Unpaid domestic work Unpaid care work Gender pay-gap Salary, pay, and income disparity Economic exploitation Women and emotional labor 	 Poverty Impact of natural hazards Food insecurity Financial independence Property, tenure, and land-holding rights Access to education 	 Sexual and gender violence against women & girls FGM - Female genital mutilation (Right to sexuality) Trafficking in women Sexual exploitation Marriage: early, child, forced Partner violence Femicide Honor killings Rape and principle of consent The #MeToo movement 	 Reproductive rights Reproductive healthcare Access to sexual and reproductive care Maternal health Maternal mortality Women's and girls' sexual rights Forced pregnancy
 9. Women's empowerment Opportunities / benefits of gender equality Role and importance of education Role and importance of enabling ITC Role and importance of policy and legislation Participation in legislation and governance Private decision-making Equality vs. Equity (fair) vs inclusion (active) 	 10. Women's rights standards (National / international) National gender equality status National norm compared to global norm Sexual consent in law Gender-responsive public budgeting and spending Global and international norms and standards Special protections for rural women Status of core rights: employment, right to vote, property, freedom of movement, legal rights, discrimination, health, education, reproductive 	 II. Leveraging women in the community Gender & community dynamics (multiple factors) Women and local resource management: food, , water, energy, and energy security Women and health: nutrition, medical care Women and education: values, 3Rs, ITC, Women and politics: public decision-making, conflict resolution Women and climate change: disaster risk reduction, mitigation, adaptation Role in family law; household management, care of elderly 	

Learning Objectives – Gender Equality

Knowledge Type	The sustainability literate learner will be able to
Definitions Descriptive knowledge	 Explain the concepts of gender, gender equality/inequality, gender discrimination, gender violence, sexual and reproductive rights Provide examples of the principal forms of gender violence (FMG, honor killings, trafficking, child marriage, forced marriage, exploitation, unequal employment, language, etc.) Describe both the current and historical origins of traditional gender roles and responsibilities Explain how gender roles are embedded into current social, economic, political, and mental structures Describe the legal and cultural principles and practices required to ensure that gender equality is upheld in both private and public settings
Current State & Trends Contextualized knowledge	 Identify and describe the principal historical, cultural, sociology-psychological, and structural barriers to gender equality Categorize the many types, sources, and manifestations of gender discrimination and compare them state to state and region to region Define the global standards for gender equality and assess the current state of local, state, and international compliance Assess the effectiveness of local, state, and international authorities in defending and assuring gender equality Articulate the benefits of gender equality as concerns individual well-being, social welfare, economic development, public & private decision-making, climate change resilience
Major Causes Causal knowledge	 Describe the role education, technology, and legislation play in advancing or —in their absence—hindering gender equality Identify traditional and cultural impediments to enacting gender equality as defended by individuals, businesses, and states Identify the multiple active and permissive causes, forms, and sources of gender discrimination and violence to women and girls Describe the origins, manifestations, distribution, and defenses of patriarchy from state to state and region to region Assess the role of local, state, and intergovernmental actors in educating, legislating, monitoring, and repressing violations vis-à-vis gender equality
Systemic Impacts Integrated knowledge	 Relate the impact of gender inequality to patterns of poverty, food insecurity, financial dependence, women's health, water scarcity, energy insecurity, etc. Situate gender discrimination at the intersection of other social categories such as race, religion, ability, identity Describe the impact of gender equality on community dynamics, political voice, democratic processes, and human flourishing Relate the concept of masculinity and its corresponding outcome—gender inequality—to the decline of biosphere integrity, the pace of climate change, & lack of social equality Estimate the impact on child health, early development, education, and social development of the marginalization and relative poverty of women in society Identify the multiple impacts that the empowerment of women has upon effective climate action—at local, regional, national, and global levels

Key Resources – Gender Equality

Progress on the Sustainable Development Goals: The Gender Snapshot 2022. (2022). UN Women and United Nations Department of Economic and Social Affairs, Statistics Division. Retrieved from https://bit.ly/gender-snapshot-2022

Raworth, K. (2017). A Doughnut for the Anthropocene: humanity's compass in the 21st century. Lancet Planet Health, 1, e48–e49. Retrieved from https://www.thelancet.com/cms/10.1016/s2542-5196(17)30028-11/attachment/2d58fdae-741c-4016-84cd-2fc0ble94f49/mmcl.pdf

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The Sustainable Development Goals Report 2021 - Extended Report-Goal 7 (Gender Equality). (2022). United Nations. Retrieved from https://unstats.un.org/sdgs/report/2022/extended-report/Extended-Report_Goal-6.pdf

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UNESCO Learning Objectives & Discussion Topics (Full report). (n.d.). United Nations Educational, Scientific and Cultural Organization. Retrieved from https://unesdoc.unesco.org/ark:/48223/pf0000247444

World Economic Forum. (2021). Global Gender Gap Report 2021: Insight Report. Retrieved from http://www3.weforum.org/docs/WEF_GGGR_2021.pdf

World Economic Forum. (2022). Global Gender Gap Report 2022: Insight Report, July 2022. Retrieved from https://www3.weforum.org/docs/WEF_GGGR_2022.pdf



2.3.1 – Education and Culture



TASK Framework: Human Welfare \rightarrow Domai	n: Human Flourishing → Subject: 2.3.1 – Education	on and Culture		Click here for User Guidelines
	lso a means to achieving the broad global development ative, and resilient lives. It strengthens their voices in con			
Social Foundation Illustrative Indicator: The social for the percent of the adult population (aged 15+) who a (aged 12-15) out of school. (Raworth, 2017)	oundation for education and culture is determined by re illiterate as well as the percent of child population	Social Foundation Status: Based upon 2013 dat social foundation for education. (Raworth, 2017)		numan population fall below the
Key Ideas6. Learning outcomes (traditional)1. The centrality of education7. Education for Sustainable Development2. Principles of quality education8. Ecopedagogy3. Forms of education9. Traditional Ecological Knowledge5. Factors hindering access to education10. Culture and sustainability		 Key International Regulatory Initiatives UN Conference on the Human Environment, Stockholm, 1972 First Intergovernmental Conference on Environmental Education in Tbilisi, Georgia, 1977 PISA - OECD Program for International Student Assessment UNESCO—Education for Sustainable Development (ESD) UNICEF United Nations Children's Fund 		
 I. The centrality of education A basic human right A global common public good Essential to human development Critical to early childhood development Role in identity formation Role in building basic skills globally A source of human emancipation and autonomy A lever for achieving the broad SDG agenda 	 2. Principles of quality education Principles: free, inclusive, equitable, lifelong, transformative, ICT-based Diversity, Equity, and Inclusion (DEI) Role of education in celebrating cultural diversity Empowerment of youth and marginalized groups Education of/for women and girls 	 3. Forms of education Formal, non-formal, informal Pre-primary education Primary, secondary, tertiary, adult, life-long TVET education Online, remote, distance education Placed-based education Experiential education Teacher training 	 Universal Free and/or affor Proximity Urban location Mothers' education 	on icipation and completion rate private funding
 5. Factors hindering access to education Poverty Conflict Disaster Patriarchy, gender discrimination and inequality Rural isolation Learning disabilities Limited finance and investment Privatization Gender literacy gap 	 6. Learning outcomes (Traditional / Conventional)) Functional literacy Reading proficiency Minimum proficiency level Functional numeracy ICT skills (info/com/tech) Critical thinking Integrated problem-solving Socialization / Social learning Prescribe and hidden curriculum 	 7. Education for Sustainable Development ESD / Environmental education Climate literacy / Systems thinking A catalyst & means to achieving other SDGs ESD integrated holistically into all programs (from K12 to Higher Ed) Role in promoting global citizenship Global learning / Global citizenship Intercultural competence 	 Eco-competenci Eco-literate curri Place-based edu 	edagogical practice es (Knowledge, attitudes, and skills) culum (formal, non-formal, informal)
 9. Traditional Ecological Knowledge (TEK) Indigenous ecological knowledge (IK) Ecological consciousness Local knowledge Spiritual and cultural significance of ecosystems Indigenous approaches to sustainable resource use Adaptation and resilience strategies based on TEK Case studies highlighting successful integration of TEK into resource management 	 10. Culture and sustainability Role of culture in achieving sustainability Art & Culture: preservation, conservation, heritage Access to culture: Obstacles and solutions Threats to culture: globalization / anglicization, Cultural education for all: youth, adults Regional culture: arts & crafts, traditions, languages, food, music, dance, etc. Artistic expression for mental health 			

Learning Objectives – Education and Culture

Knowledge Type	The sustainability literate learner will be able to
Definitions Descriptive knowledge	 Describe the basic conditions and elements that are required for designing, delivering, and demonstrating (assessing) a quality education Identify the principal attributes of a quality education (i.e., inclusive, equitable, lifelong, ICT-based, affordable, accessible, etc.) Compare and contrast the multiple forms of providing education (formal, informal, non-formal) Explain the important role education plays in supporting basic human needs, improving lives, driving social-economic development, and achieving sustainable development Identify the minimal requirements of what constitutes access education Describe the principal strategies and mechanisms for providing equitable and affordable access to education Define the nature, purpose, and pedagogies of <i>Education for Sustainable Development</i>
Current State & Trends Contextualized knowledge	 Describe the extent and effectiveness of education from state to state and region to region Describe the principles, practices, and outcomes of environmental education and corresponding eco-pedagogy Describe the structural barriers, principal impediments, and traditional inequalities vis-à-vis access to education Assess the effectiveness of local and state, and international authorities in providing quality education for all Identify the principal strategies for providing quality education to marginalized groups
Major Causes Causal knowledge	 Identify the multiple forms and sources of discrimination in providing quality education Identify actors, institutions, policies, and belief systems respectively supporting educational opportunity or hindering such access to quality education Account for the lack of teaching training in <i>Education for Sustainable Development</i>
Systemic Impacts Integrated knowledge	 Describe the role education plays in creating societies able to innovate for sustainability development and provide resilience in time of climate change Identify the role education plays in fostering complex global interrelationships, ecosystem services, and Earth sustainability Assess the impact gender inequality and poor education have on human health, food security, and socioeconomic processes Imagine and describe the risks and worst-case scenarios stemming from low levels of education

Key Resources – Education and Culture

EUNIC. (2021). The Cultural Dimension of Sustainable Development: Opportunities for National Cultural Institutes. Retrieved from https://www.eunicglobal.eu/news/culture-sdgs-report

European Commission. (2022). GreenComp - The European sustainability competence framework. Retrieved from https://publications.jrc.ec.europa.eu/repository/handle/JRC128040

Raworth, K. (2017). A Doughnut for the Anthropocene: humanity's compass in the 21st century. Lancet Planet Health, 1, e48–e49. Retrieved from https://www.thelancet.com/cms/10.1016/s2542-5196(17)30028-11/attachment/2d58fdae-741c-4016-84cd-2fc0ble94f49/mmcl.pdf

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UNESCO. (2014). Sustainable Development Begins with Education. Retrieved from https://en.unesco.org/gem-report/sustainable-development-begins-education

UNESCO. (2020). Education for Sustainable Development: A Roadmap. Retrieved from https://unesdoc.unesco.org/ark:/48223/pf0000374802.locale=en

UNESCO Learning Objectives & Discussion Topics (Full report). (n.d.). United Nations Educational, Scientific and Cultural Organization. Retrieved from https://unesdoc.unesco.org/ark:/48223/pf0000247444

World Economic Forum. (2021). Global Gender Gap Report 2021: Insight Report. Retrieved from http://www3.weforum.org/docs/WEF_GGGR_2021.pdf



2.3.2 – Peace, Justice, and Political Voice



TASK Framework: Human Welfare → Domain: Human Flourishing → Subject: 2.3.2 Peace, Justice, and Political Voice

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Definition: Peace and Justice — Promoting peaceful and inclusive societies and providing access to justice for all is both defined and achieved by the reduction of violence in all its forms, the rule of law, accountable and transparent institutions, and responsive, inclusive, participatory decision-making. (SDG-16) **Political Voice** is a composite measure of freedom of expression, freedom of association, and meaningful political and civic engagement. Democratic governance of society and the economy rests on the right and capacity of citizens to engage in public debate—the essential importance of political voice." [Raworth, DE-77] Moreover, ensuring 'responsive, inclusive, participatory, and representative decision-making at all levels' is the focus of SDG Target 16.7. To this end, the World Bank captures perceptions of the extent to which a country's citizens are able to participate in selecting their government, as well as freedom of expression, freedom of association, and a free media. (World Bank-Worldwide Governance Indicators).

 Social Foundation Illustrative Indicator: The social foundation for peace, justice, and political voice is
 Social Foundation Status: The UN report

 determined by the rate of intentional homicide (i.e., unlawful death purposefully inflicted on a person by
another person), and how corrupt the public sector is perceived to be. The indicator used to assess a shortfall
of political voice is the Voice and Accountability Index, which is a component of the World Bank's Worldwide
Governance Indicators. The index includes measures of democracy, vested interests, accountability of public
officials, human rights, and freedom of association. [Raworth, Lancet-2017, p.7-8]
 Social Foundation Status: The UN report
SDG-16. One quarter of humanity lives in
million people had been forcibly displace.
Citizens also face challenges accessing
underrepresented due to ineffective inst
emerging human rights challenges are provided by
(SDG-16)

 Key Ideas
1. Holistic approach to P-J-PV
 6. The role of media in politics and justice
T. Impact of corruption on peace and iustice
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 Key International Regulatory Initiatives
of Human Ri

Social Foundation Status: The UN reports that violent conflicts are derailing the pathway to achieving SDG-16. One quarter of humanity lives in conflict-affected areas and as of May 2022, a record 100 million people had been forcibly displaced worldwide--more than double the number a decade ago. Citizens also face challenges accessing justice, basic services/legal guarantees and are generally underrepresented due to ineffective institutions. Moreover, structural injustices, inequalities and emerging human rights challenges are putting peaceful and inclusive societies further out of reach. (SDG-16)

 Key Ideas Holistic approach to P-J-PV Political systems International human rights frameworks Civil and political rights Governance and lawmaking 	 6. The role of media in politics and justice 7. Impact of corruption on peace and justice 8. Inclusion and representation of minorities 9. Conflicts, refugees, and International Treaties 10. Criminal justice 11. Child labor and modern slavery 	 Key International Regulatory Initiatives The Universal Declaration of Human Rights International Humanitarian Law (e.g., Geneva Conventions) Rome Statute of the International Criminal Court 	
 I. Holistic approach to P-J-PV Peace: definitions, dimensions, and theories Justice: procedural, retributive, distributive, and restorative approaches Political voice: expression, participation, and influence Understanding justice and inclusion in the context of peace 	 2. Political systems Democracy: direct, indirect (representative) Authoritarianism, dictatorship: control, power concentration Fascism: Anti-liberalism, nationalism, totalitarianism Sovereignty: autonomy, territoriality, non-interference Rule of law: equality, transparency, accountability Exploring states of exception and emergency: Legal definitions and political Implications 	 3. International human rights frameworks Key international human rights instruments: Universal Declaration of Human Rights, international covenants, conventions Importance of binding international treaties: enforceability, compliance, and accountability 	 4. Civil and political rights Free speech: definitions, limits, and controversies Right to assembly: Peaceful protests, strikes, and public gatherings Political participation: voting, representation, and accountability Access to information Privacy and surveillance
 5. Governance and lawmaking Separation of powers: legislative, executive, judicial (+ press and economic as 4th and 5th power) Comparative overview of national legal systems: common law, civil law, and others Understanding legislative processes: bill creation, debate, voting, and implementation Public Participation in government: voting, petitioning, lobbying, and protest International law and relations 	 6. The role of media in politics and justice Press freedom Disinformation and fake news Media concentration Ownership patterns, market dominance Impacts on democratic processes: media pluralism, access to information, bias Regulatory approaches: antitrust laws, public service broadcasting Media's role in peacebuilding, conflict escalation, and social justice movements 	 7. Impact of corruption on peace and justice Petty corruption, grand corruption, systemic corruption Social: undermined trust in public institutions, erosion of social cohesion Political: instability, impaired governance Environmental: deforestation, waste management Economic: reduced development, increase inequalities, distorted market conditions, discourage investments Anti-corruption measures: transparency, whistleblowing, independent oversight 	 8. Inclusion and representation of minorities Inclusive education: accommodations, special education, universal design for learning Inclusive employment: diversity and inclusion initiatives, equal opportunity laws Inclusive public policy: anti-discrimination laws, social services, representation Minorities in media and culture: lack of representation, stereotyping, cultural appropriation
 9. Conflicts, refugees, and international treaties Political, economic and climate migrants Refugee rights and challenges: asylum, statelessness, integration International peace treaties Post-conflict reconciliation and transitional justice Illegal weapons trade: small arms, landmines, chemical and biological weapons 	 10. Criminal justice Death penalty: ethics, deterrence, miscarriages of justice International Criminal Court: mandate, jurisdiction, and cases Combating impunity: transitional justice, war crimes tribunals, and truth commissions Prison system Rehabilitation and reform: theories of punishment; practices of rehabilitation; recidivism rates 	 11. Child labor and modern slavery Child labor: definitions, causes, and global prevalence Modern slavery: forced labor, human trafficking, and debt bondage Legal and regulatory frameworks: International Labor Organization Standards, UN conventions, national laws 	

Learning Objectives – Peace, Justice, and Political Voice

Knowledge Type	The sustainability literate learner will be able to
Definitions Descriptive knowledge	 Identify key institutions and treaties for peace Identify the diversity of conceptions of justice Identify public participation concerns in SDGs and the notion of inclusion Define ableism and human-right approach to disability Identify and explain control variables to measure peace, justice and political voice
Current State & Trends Contextualized knowledge	 Describe recent trends of the number of violent conflicts, and people living in conflict-affected areas Estimate the number and trends of child labor, especially the worst forms List and estimate the economic weight of the main international illegal trades Identify and estimate the number of countries still practicing death penalty Estimate and localize recent trends related to forced migration
Major Causes Causal knowledge	 Identify common practices that directly put human rights defenders at risk List the underlying drivers of transgressing peace, justice and political voice Describe the nature of international law in relation to sovereignty Identify major actors contributing to -or resisting- the transgression of peace, justice and political voice Identify the levers to stop child labor and modern slavery
Systemic Impacts Integrated knowledge	 Identify internal and external consequences of war, for example in Ukraine Identify climate adaptation measures contributing to peace and explain how Explain the specificities of indigenous peoples relating to participation in the SDGs

Key Resources – Peace, Justice, and Political Voice

Reporters Without Borders. (2023). World Press Freedom Index 2023. Retrieved from https://rsf.org/en/2023-world-press-freedom-index-journalism-threatened-fake-content-industry

Raworth, K. (2017). A Doughnut for the Anthropocene: humanity's compass in the 21st century. Lancet Planet Health, 1, e48-49. https://www.thelancet.com/journals/lanplh/article/PIIS2542-51961730028-1/fulltext#sec1

Raworth, K. (2017a). A supplement to A Doughnut for the Anthropocene: humanity's compass in the 21st century. Lancet Planet Health, 1, e48–49. <u>https://www.thelancet.com/cms/10.1016/s2542-5196(17)30028-</u> 1/attachment/2d58fdae-741c-4016-84cd-2fc0ble94f49/mmc1.pdf

United Nations. (n.d.). SDGs: The 17 Goals, 169 targets, overview, indicators, progress & info. Retrieved from https://sdgs.un.org/goals

United Nations. (2022). The Sustainable Development Goals Report. Retrieved from https://unstats.un.org/sdgs/report/2022/

United Nations High Commissioner for Refugees. (2023). Global Report 2022. Retrieved from https://www.unhcr.org/what-we-do/reports-and-publications/global-report

UNESCO. (n.d.). UNESCO Learning Objectives & Discussion Topics (Full report). Retrieved from https://unesdoc.unesco.org/ark:/48223/pf0000247444



2.3.3. – Access to Networks and Human Interaction



TASK Framework: Human Welfare \rightarrow Dom	ain: Human Flourishing → Subject: Access to Networks	s and Human Interaction	<u>Click here for User Guidelines</u>
and between individuals and institutions, can be se degraded through structural obstacles in the socia	ystem to meet their needs such as, for example, participation, or een as a complex adaptive system with essential aspects. These Il system (the network) to individuals' access to health, influence, social system's adaptive capacity, it can limit people's possibilitie	are: trust, diversity, self-organization, learning, and com competence, impartial treatment, and common mear	mon meaning. These aspects can be ing-making. When these structural
Social Foundation Illustrative indicator: (Raworth, 1 - Population stating that they are without someor 2 - Population without access to Internet		Social Foundation Status: (Raworth, 2017a) 1 - People with no social support network: 24% in 2015 2- People with not access to internet: 57% in 2015	
Key Ideas 1. Network theory 2. Social sustainability 3. Theory of exclusion cycle, isolation, lonelines: 4. Sustainable communities 5. Mobility, accessibility, and transportation net	9. Global networks	 Key International Regulatory Initiatives United Nations Internet Governance Forum (IGF) International Telecommunication Union (ITU) General Data Protection Regulation (GDPR) 	
 I. Network theory Human Network theory, Cluster Theory, Dyads, Gladwell's network, and tipping points Human Needs (Maslow, Max-Neef) Support Networks (Raworth), Circle of Caring Ostrom, the Commons Social capital, strength of weak ties 	 2. Social sustainability, a systemic complex perspective Sustainability 3 pillars, one of them: social sustainability Raworth's Social Foundations Social systems as complex adaptive systems Essential elements of social systems' adaptive capacity: trust, common meaning, diversity, capacity for learning and capacity for self-organization (Missimer, 2017) Degradation of the social system's adaptive capacity through structural obstacles to (1) health, (2) influence, (3) competence, (4) impartiality and (5) meaning-making. (Missimer, 2017a) 	 3. Theory of exclusion cycles, Isolation, Ioneliness Bullying, harassment Stigmatization and Discrimination Vulnerabilities and compounding inequalities Mental health and health care Elderly isolation Traditional family units and dynamics contributing to isolation Addictions 	 4. Sustainable communities Community building, free accessible public spaces Collective decision making Crowdfunding, unions Disaster preparedness, resilience Access to sports facilities, access to arts facilities, access to green spaces
 5. Mobility, accessibility, and transportation networks Sustainable, affordable public transportation Accessibility of public spaces for children, people with disabilities and/or reduced mobility Safety of public spaces 	 6. Internet and telecommunication access Means of telecommunication (Inequality of) Access to internet, cell phone coverage (infrastructure, geographical and technological limitations) Remote work and online education Digital skills gap and digital literacy education Screen time and screen addictions 	 7. Information exchange Polarization, Fake news, and misinformation (traditional and social media) Freedom of speech, hate speech Conspiracy theory, echo chambers and bubble Democratization and mainstreaming of information access Social media coordination: Arab Spring, Hong Kong demonstrations 	 8. Digital human rights (Mass) Surveillance, data tracking Right to Privacy Cyber bullying Activists, whistleblowers protection
 9. Global networks Globalization Freedom of movement of people, goods, money (EU: Schengen) Borders and barriers to movement: VISA, closed borders Multi-national Companies (MNCs) and NGOs 	 10. Human/non-human interactions Animal – human interactions and interdependencies: agriculture, domestic, wild Animal Rights Human – Nature interactions for health, wellbeing Gaia Theory, biological networks Access to nature 		

Learning Objectives – Access to Networks and Human Interaction

Knowledge Type	The sustainability literate learner will be able to
Definitions Descriptive knowledge	 Define access to network, social interactions, and digital inclusion Determine the main components of access to networks Distinguish digital social network from social networks Define and Distinguish isolation from loneliness
Current State & Trends Contextualized knowledge	 Identify and explain the social foundation illustrative indicator used to determine the level of access to network and social interactions Quantify current state and trends of the control variables for access to network and social interactions Describe past, current, and predictable trends of internet access and global public transportation Identify current main mean to access internet in low-income countries Determine geographical and social disparities of internet access
Major Causes Causal knowledge	 List and rank the main direct causes and barriers of lack of internet access List the underlying drivers that hinder access to networks and social interactions List the main consequences of quarantine and social distancing policies Identify the characteristics of people disproportionally affected by social distancing policies Identify major actors that contribute to-or resist-the lack of internet access
Systemic Impacts Integrated knowledge	 Identify and rank major consequences of lack of social interactions Characterize a good public transportation network and its consequences Describe the systemic loop of social exclusion

Key Resources – Access to Networks and Human Interaction

Missimer et al. (2017). A strategic approach to social sustainability – Part 1: exploring the social system. Journal of Cleaner Production, 140 (Part 1), 32–41. https://doi.org/10.1016/j.jclepro.2016.03.170

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Raworth, K. (2017a). A supplement to A Doughnut for the Anthropocene: humanity's compass in the 21st century. Lancet Planet Health, 1, e48–49. https://www.thelancet.com/cms/10.1016/s2542-5196(17)30028-1/attachment/2d58fdae-741c-4016-84cd-2fc0ble94f49/mmc1.pdf

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