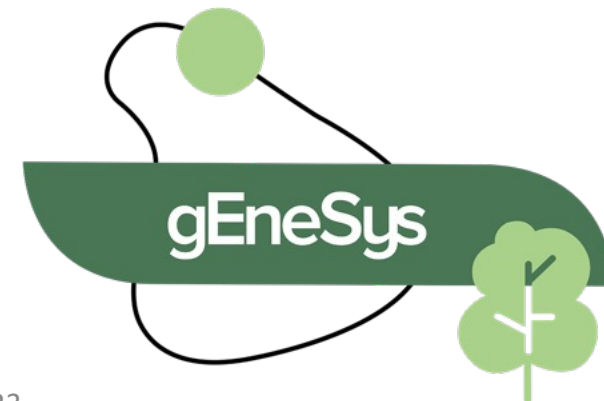




GENDER GAPS IN DEFINITIONS, ANALYSES & IMPLEMENTATIONS OF SDGs



Elizabeth Pollitzer



UN Agenda 2030 is failing women

“No country is on track to meeting the goal of gender equality – without which none of the others will be met, and in fact, the gap in several [of them] is growing.”

(Antonio Guterres, 2020)

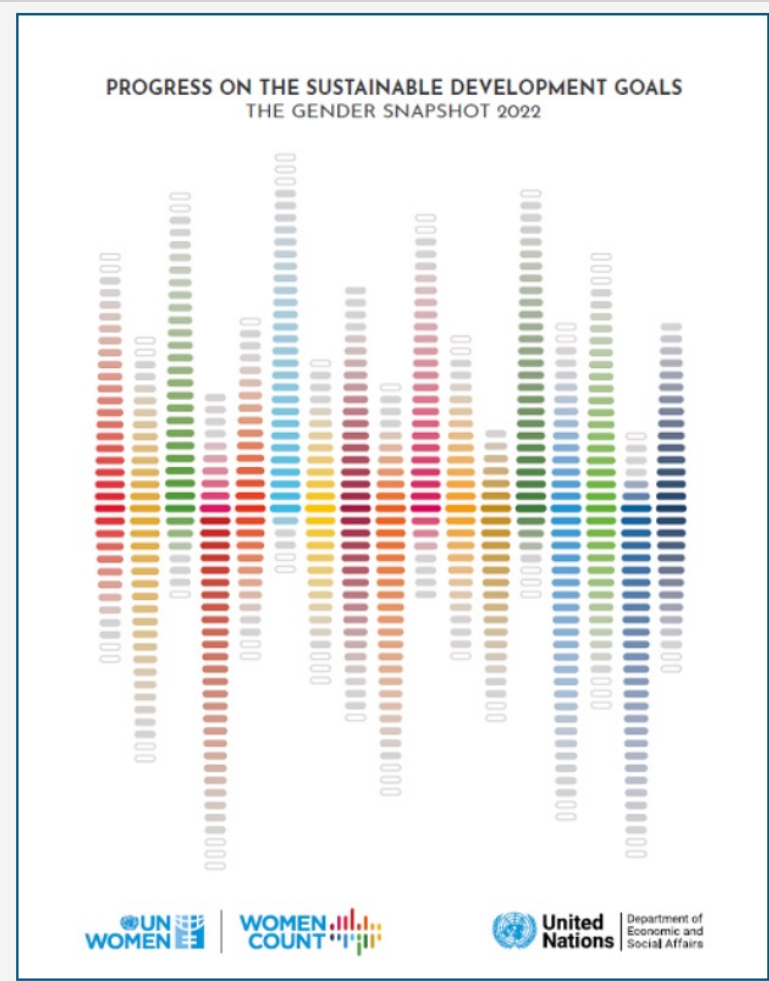
Eight SDGs make no mention of women, girls, boys, men, etc. as targets for intervention



UN Women have identified 125 gender-related indicators but only for six SDGs



Lack of capacity at country-level to collect reliable data on SDGs



An analysis of the indicators in the Global SDG Indicators Database reveals that for 4 of the 17 goals, less than half of 194 countries, or areas, have internationally comparable data. This lack of country-level data is particularly worrisome for Goal 5 where on average only about 4 in 10 countries have data available.

UN has recommended that gender perspective should be integrated into analysis of each SDG



SDG6

Dirty water kills more women than AIDS and breast cancer together



SDG2

Almost 1.0 million girls under 5 die annually from diarrheal diseases



SDG9

Women have 47% higher risk of injury in a car crash than men do



SDG11

Natural disasters make women's survival 4 times less likely than that of men



SDG12

75% of new diseases emerge from animals: women are at greater risk of exposure



SDG7

Women are at greater health risk from internal pollutions from cooking stoves



SDG15

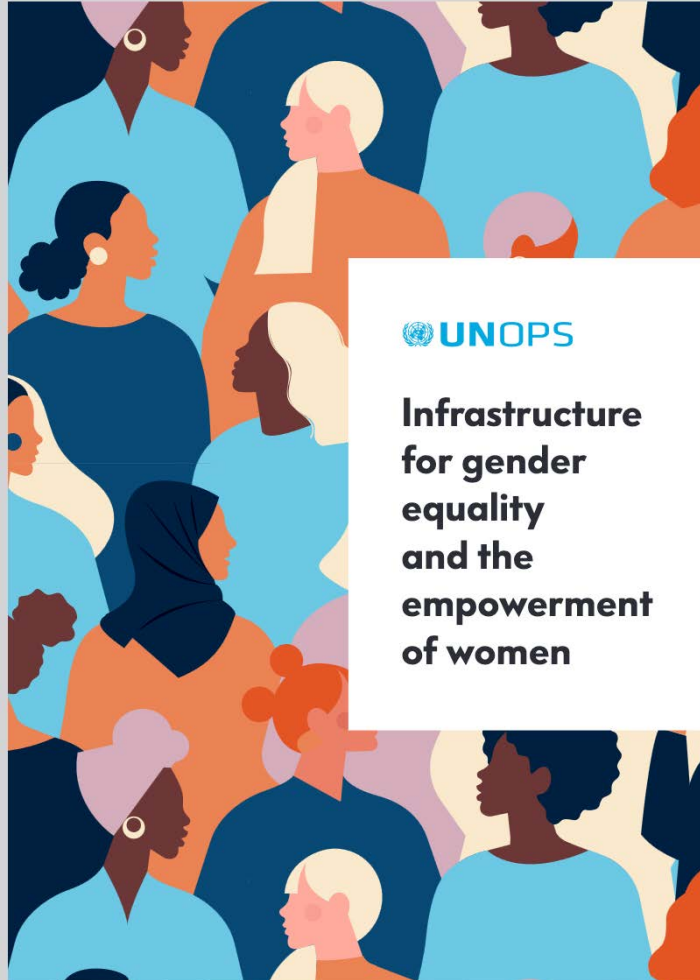
Women have better knowledge of local plants and their uses than men



SDG10

Women and girls spend much more time gathering fuel than men and boys

Example: SDG9 has no gender indicators or gender targets, but it is gendered



The sheer volume of existing infrastructure that has been designed in a manner that fails to consider the specific needs of women and girls is alarming (Morgan et al 2020)

Example: SDG7 has no gender targets or gender indicators



7.1 By 2030, ensure **universal access** to affordable, reliable and modern energy services

7.2 By 2030, increase substantially the share of renewable energy in the **global energy mix**

7.3 By 2030, double the **global rate of improvement** in energy efficiency.

Examples of energy-related gender issues

The gender cost of poor access to electricity is estimated to be equal to 0.8 trillion USD annually (ESMAP, 2020).

Women perceive grid electricity as costly, unreliable and often unavailable. They feel excluded because men assume a moral right to make major decisions (Winther et al. 2018)

Women are neither the sole nor primary beneficiaries of access to electricity, even when appliances that would particularly benefit women are affordable by the household (Rosenberg et al. 2019).

Gendered roles mean that men do not spend much time in the house and do not believe they benefit greatly from modern household energy technologies (Fingleton-Smith 2018)

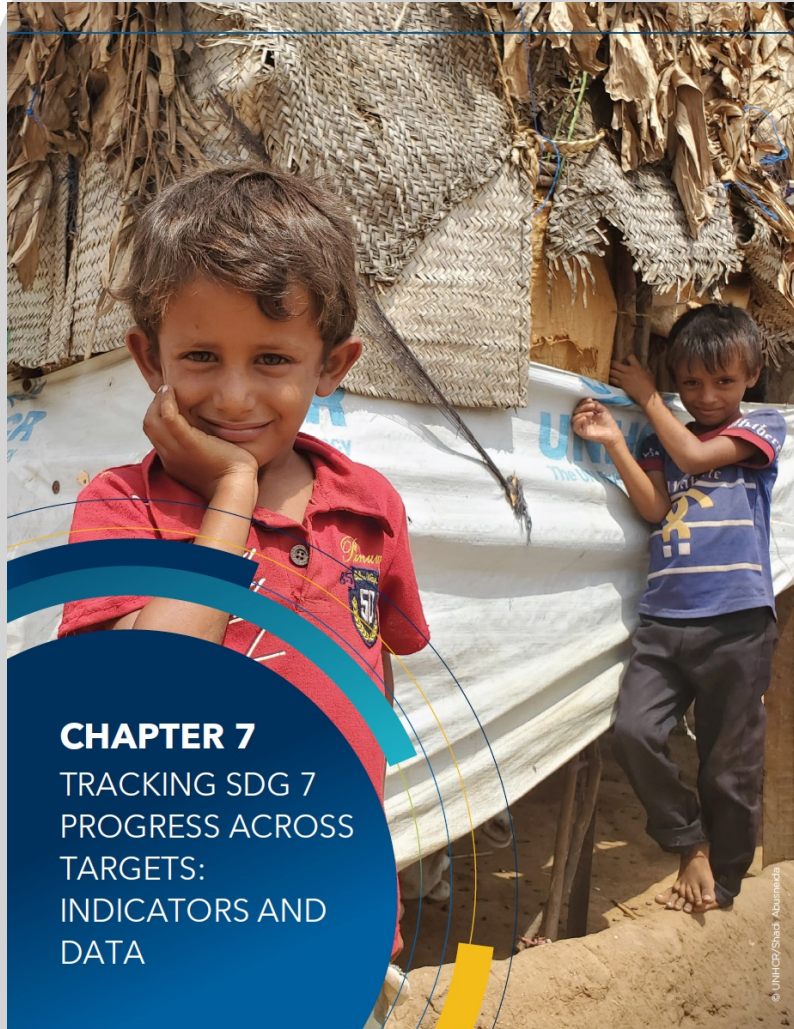
Empowering women to provide their own bioenergy requires extension services to enable effective sustainable planting, and loans for purchasing seeds, plants, oil presses and generators (Araujo 2008)

Land-use changes affect women's livelihoods often in traumatic way through displacement and loss of community identity, impoverishment, and negative health impacts (Kropiwnicka and van Paassen, 2020)

Despite the trends in clean fuel uptake, the use of multiple stove and fuel combinations within the same household remains the norm (ESMAP 2021)

Individual preferences and investment attitudes as well as cultures differentiate how women and men participate in Renewable Electricity Production (Fraune 2015)

Gender in tracking progress on SDG7 is limited to data from household surveys



CHAPTER 7

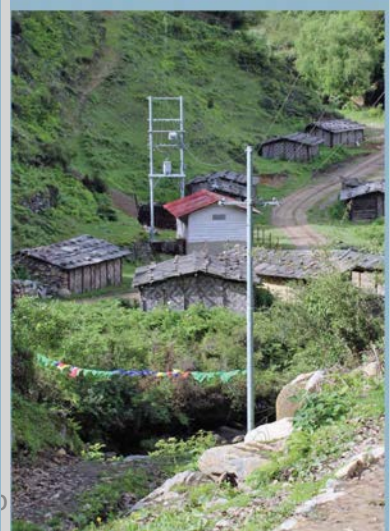
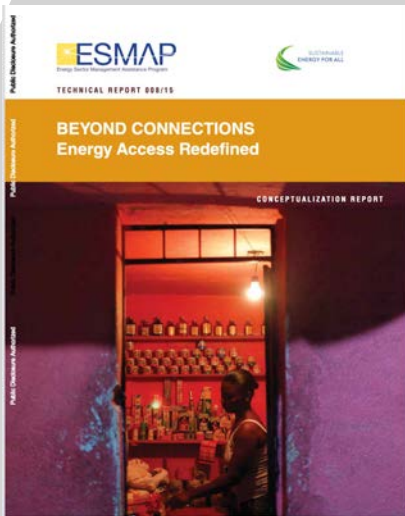
TRACKING SDG 7
PROGRESS ACROSS
TARGETS:
INDICATORS AND
DATA

Household surveys are currently the main primary data source for analysing access to energy.

Efforts have been made by WHO and World Bank to harmonise survey design, but gender-related questions are limited to who gathers fuel and cooks.

A more complete picture is needed of what improved “access” means from a gender perspective.

We need to include gender equality issues at household-, community-, productive-use levels



Unpacking SDG7 from a gender perspective

Which social groups should be targeted, included, measured?

How is affordable defined and do women and men agree?

How are women involved in the consultation process?

Who controls access and how?

What does “reliable” means for women and men in terms of their needs and behaviours

7.1 By 2030, ensure universal access to affordable, reliable and modern energy services

Are decisions favouring households, communities or enterprises: who decides

7.2 By 2030, increase substantially the share of renewable energy in the global energy mix

Is this likely to impact on women/men farmers when land is used to produce biomass energy rather than food

7.3 By 2030, double the global rate of improvement in energy efficiency.

What is prioritised: household, community or productive use

Global South vs Global North?

Are women involved in setting the criteria

Are women researchers contributing solutions to this

Implementation strategies have focused on interlinkages between Goals/Targets with five key analytical approaches

Linguistic Approach	Literature Approach	Argumentative/ Expert Judgment	Quantitative Approach	Modelling Approach
<ul style="list-style-type: none">• assess interlinkages based on common keywords• ambiguities when goals share meaning but no keyword or vice versa• requires qualitative text interpretation• First easy step to identify obvious interlinkages	<ul style="list-style-type: none">• identifying interlinkages that are established in the scientific literature• exploratory approach• requires interpretation when scientific concepts have to be connected with respective targets	<ul style="list-style-type: none">• often in combination with literature approach• links targets to each other by identifying relationships among the concepts involved• judgment made by individuals or groups of sector-specific experts	<ul style="list-style-type: none">• identifying interlinkages by performing quantitative statistical analysis with the underlying indicators• historical data - often employed in data mining exercises• more robust than the qualitative approaches where individuals do the evaluation	<ul style="list-style-type: none">• Modelling complex systems interactions can help to understand interdependencies among variables• no specific tool for modelling SDGs does exist so far• rather expanding on existing models by adapting them

Figure 1 The five methodological approaches developed to support analysis of interactions between different Goals and Targets²⁹

Gender gaps in scientific research, statistics, expert judgement, empirical evidence, and in models

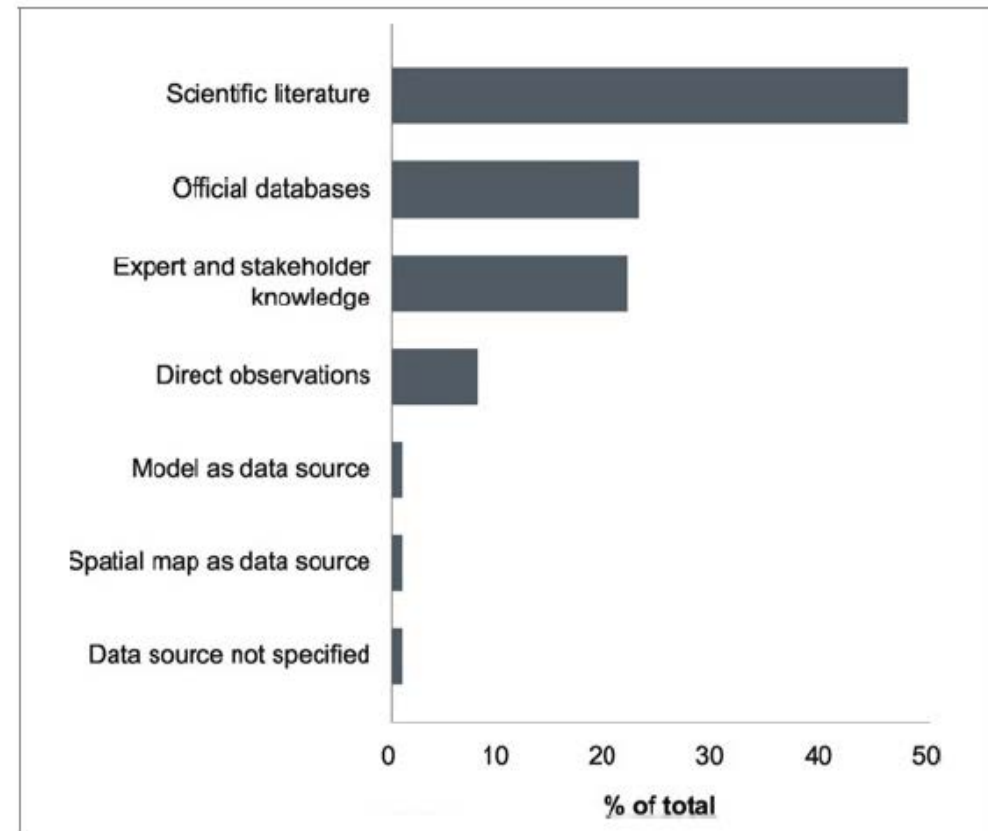
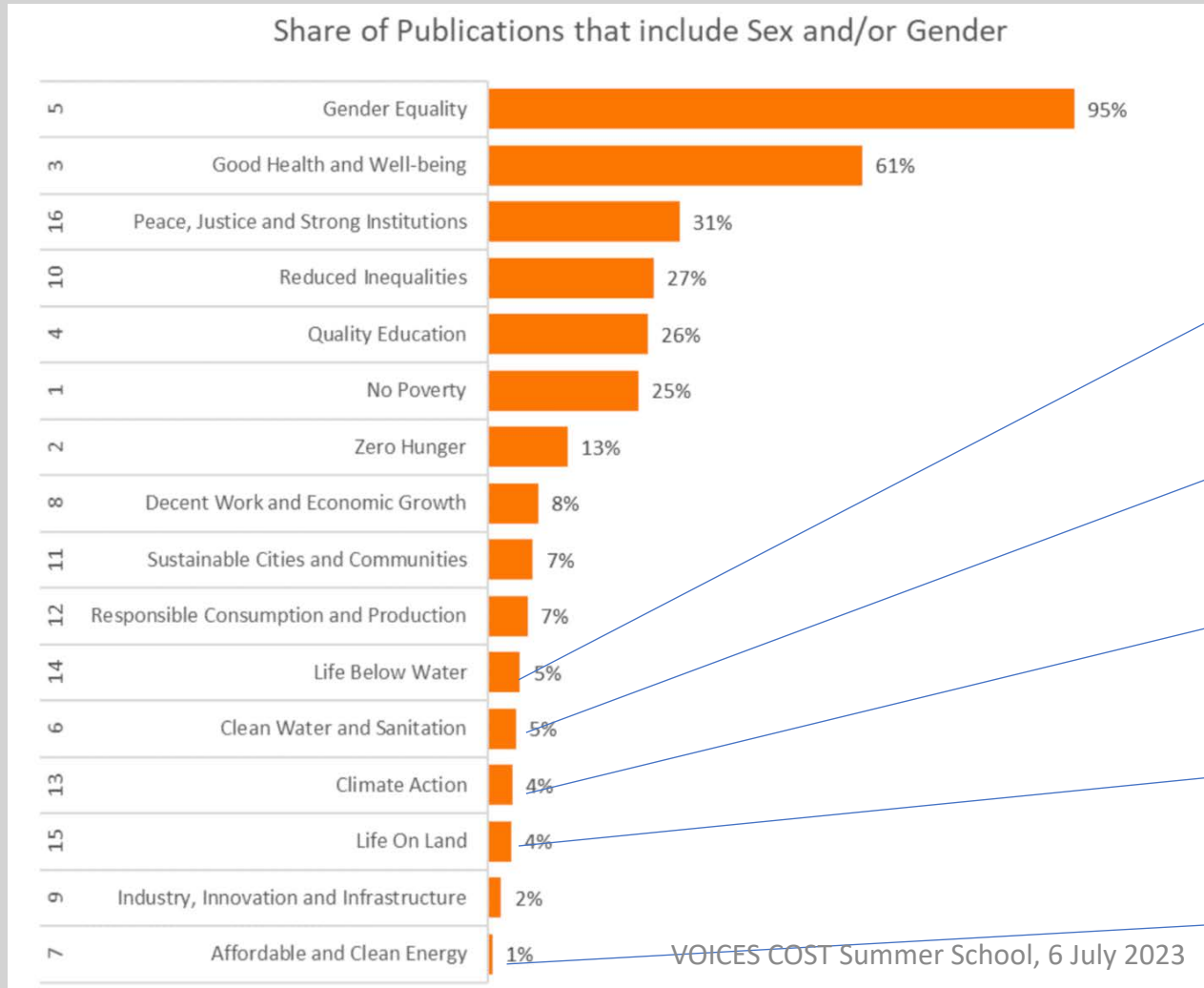


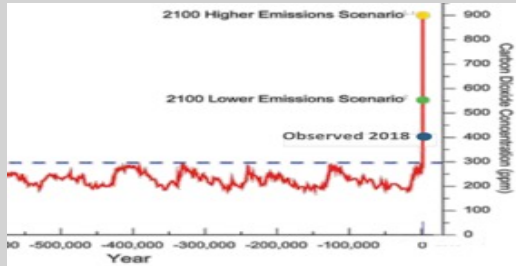
Figure 1. The sources of evidence used to underpin analyses of SDG interactions, from Bennich et al. 2020

Research on half of the SDGs is 'gender blind'

Herbert et al 2020



SDG 14: gaps in knowledge



Raised CO2: mortality of female shrimp increases



Cichlids – Inc. pH > females



Zebrafish – faster growth > females



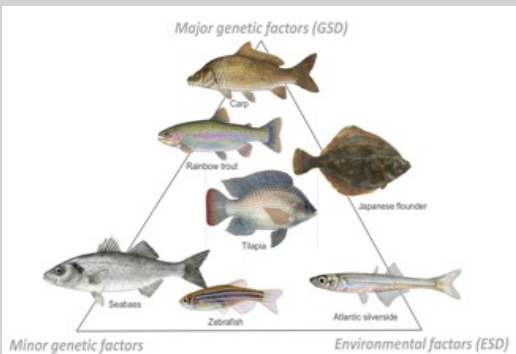
Japanese flounder – male biased < 15°C & > 27°C, balanced 20-23°C



Eels – crowding associated with > males



Exposure to reduced seawater pH led to 16% more females in oysters



Male and female mussels respond differently to increased CO2

Sex has been reported in only 4% of marine species studies (Ellis, R. et al, 2017)

Gender bias in UN agencies reports on SDGs

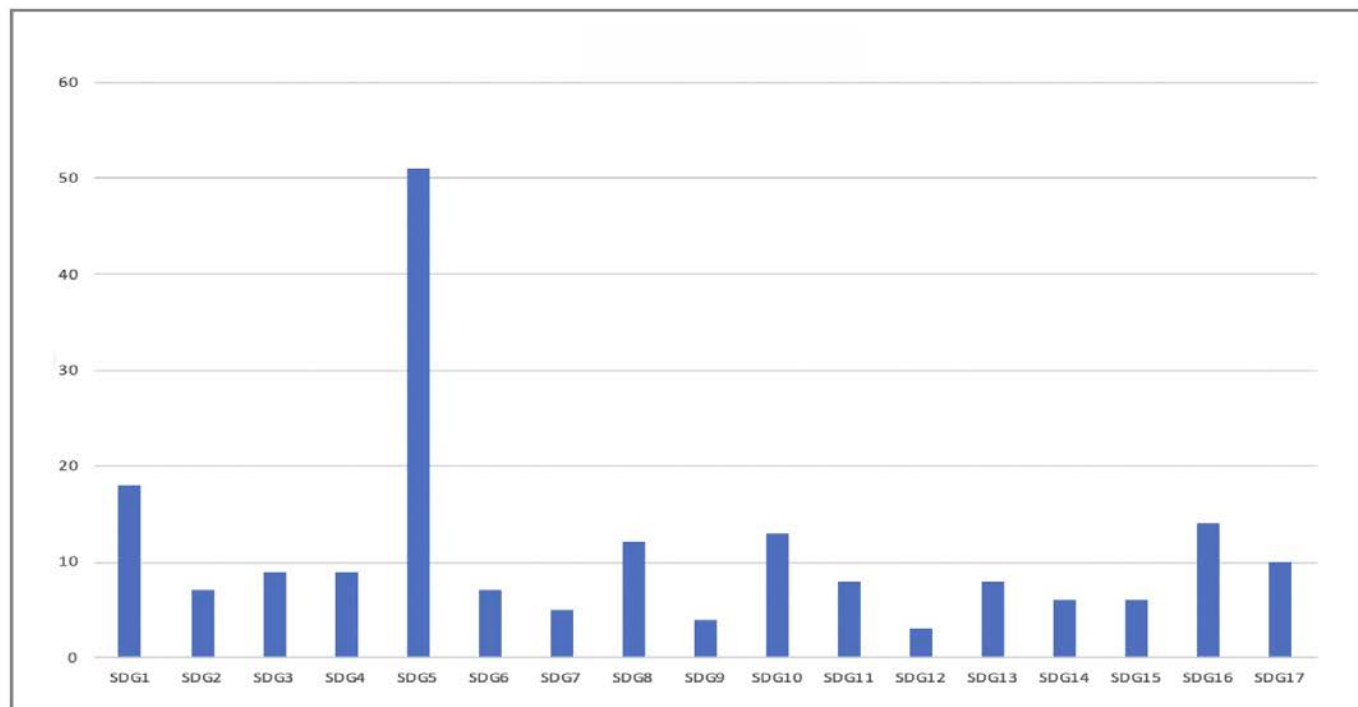
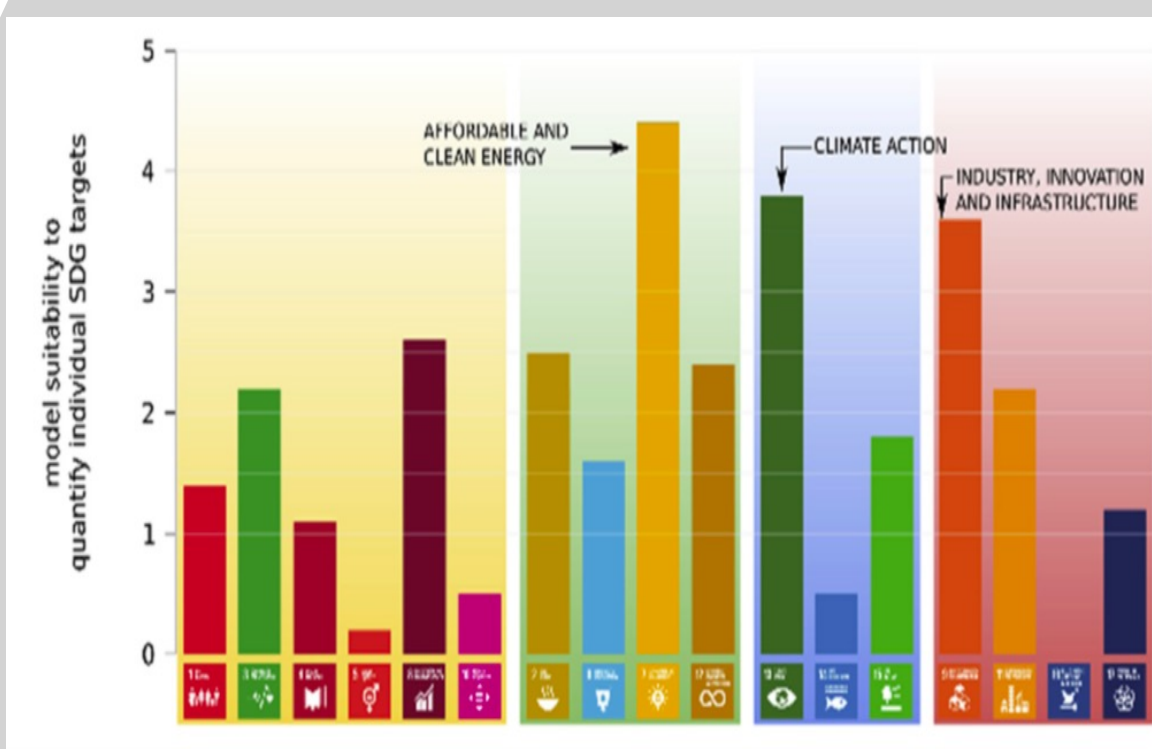


Figure 5. 51 UN entities include a focus on SDG5 in their main strategic plans, 18 on SDG1 (*no poverty*); 13 on SDG10 (*inequalities*), 12 on SDG8 (*decent work*), and 14 on SDG16 (*peace and justice*). Notable gaps are in relation to SDGs 7, 9, 12, 14, and 15. From: Report of the Secretary-General, E2019/54

Incorporation of gender perspectives in more technical thematic areas, such as infrastructure, energy and new technologies, remains weak relative to other areas of work. Notable gaps for SDG 7, 9, 12, 14, 15

Gender 'blind/biased' expert judgement



SDG	Number of respondents (groups 1-4)	Number of respondents (group 5: IISD mailing list)	Number of respondents (group 5), filtered	Number of respondents (together)	Number of respondents (together), filtered
SDG 1	0	3	2	3	2
SDG 2	0	1	1	1	1
SDG 3	2	2	1	4	3
SDG 4	1	5	1	6	2
SDG 5	0	0	0	0	0
SDG 6	1	2	2	3	3
SDG 7	3	4	3	7	6
SDG 8	0	4		4	2
SDG 9	1	0		1	1
SDG 10	1	0		1	1
SDG 11	3	4	4	7	7
SDG 12	0	3	3	3	3
SDG 13	0	3	3	3	3
SDG 14	1	0	0	1	1
SDG 15	3	4	2	7	5
SDG 16	1	4	2	5	3
SDG 17	2	4	4	6	6

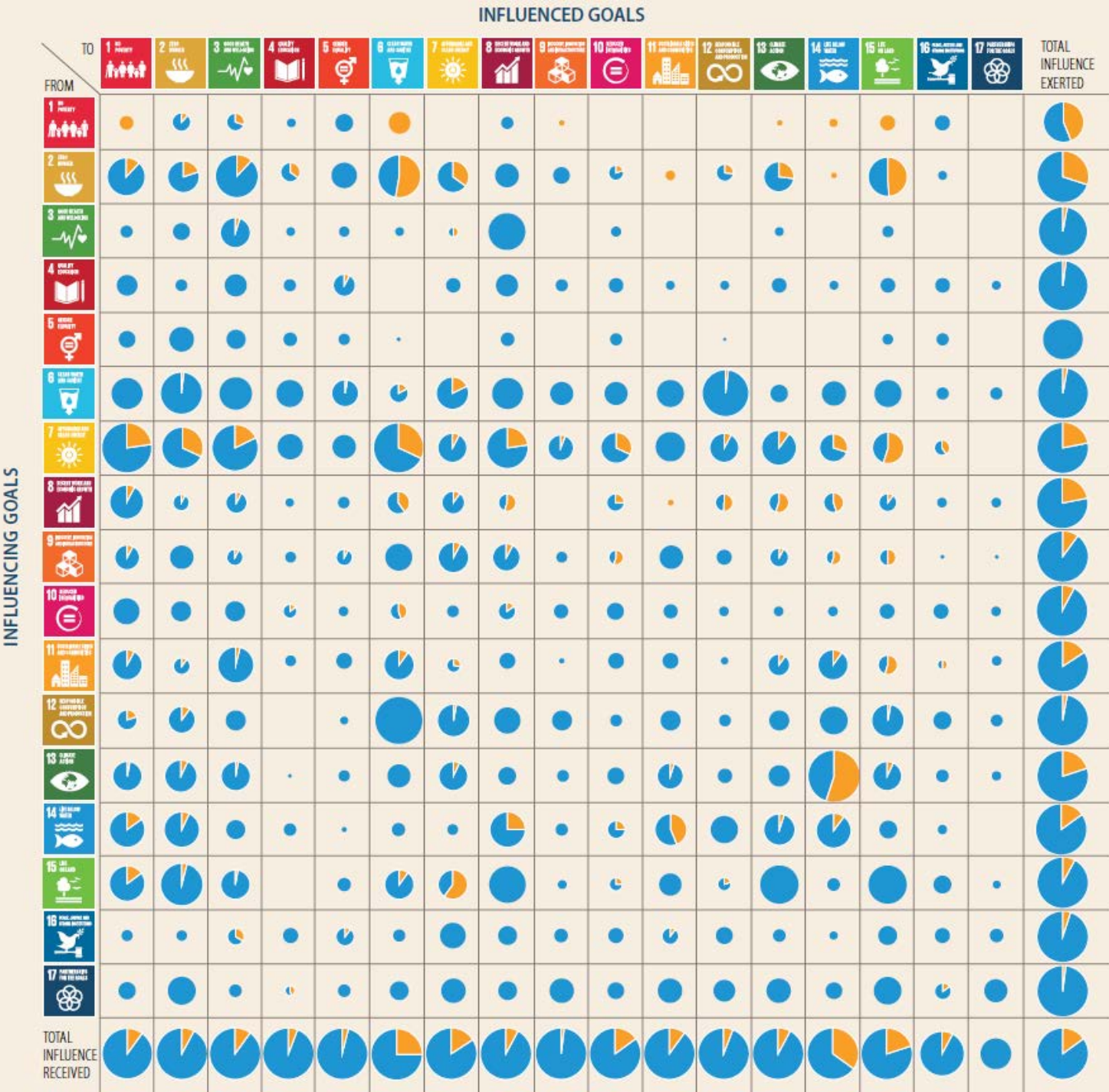
In the different models of influential interconnections between SDGs the least included are SDGs related to inequalities: SDGs 5 and 10 (van Soest et al 2019)

Survey of researchers building models of SDGs interactions (van Soest et al 2019)

How SDG experts have perceived the influence of each goal on other goals

Little attention to the role of SDG5 suggesting absence of gender experts

SDG7 dominates analyses suggesting dominance of technology experts



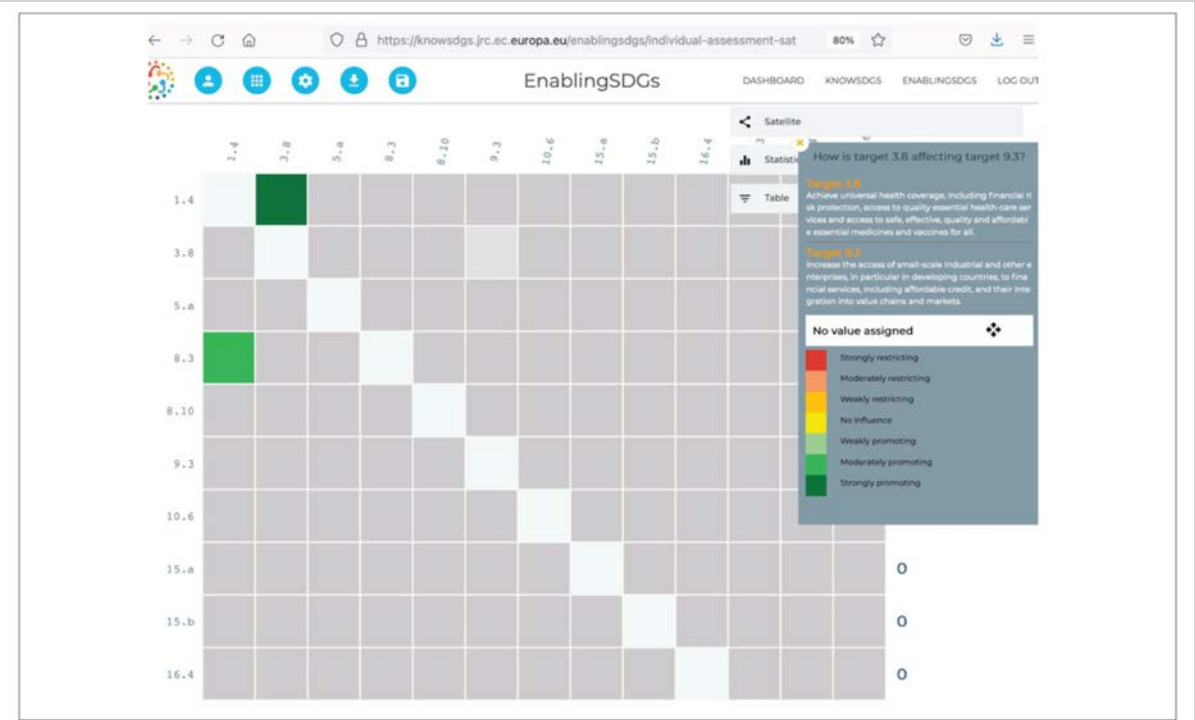
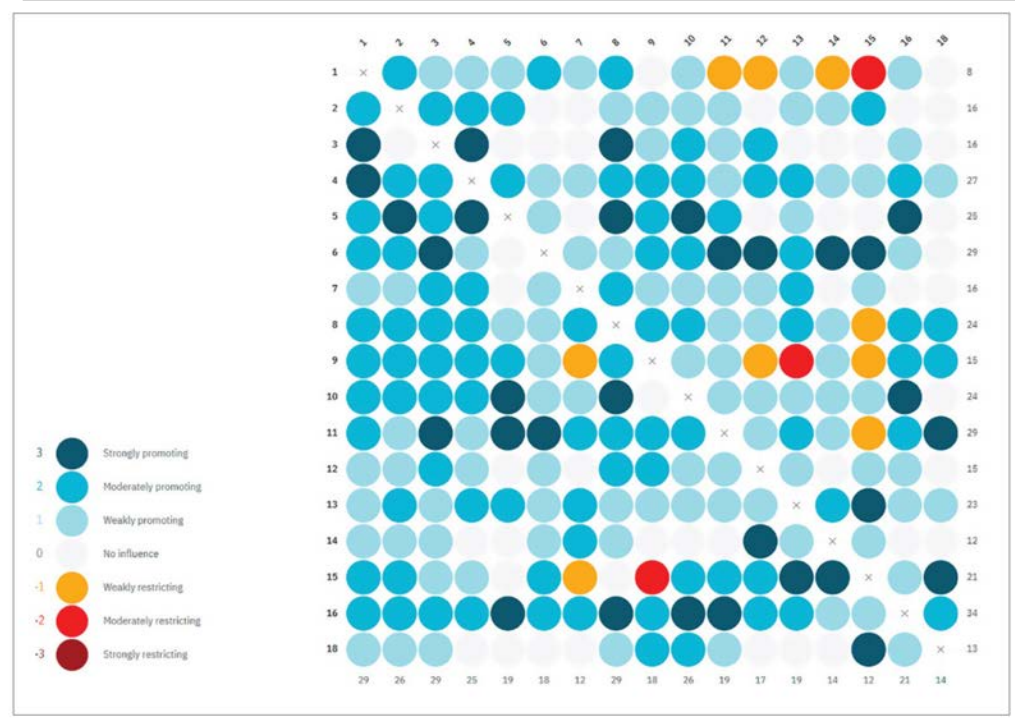
VOIC

The 7-point scale commonly used in expert judgement to prioritize SDGs for implementation

Interaction label	Interpretation
+3 Indivisible	Progress on one target automatically delivers progress on another
+2 Reinforcing	Progress on one target makes it easier to make progress on another
+1 Enabling	Progress on one target creates conditions that enable progress on another
+/- Consistent	There is no significant link between the progress of the two targets
-1 Constraining	Progress on one target constrains the options for how to deliver on another
-2 Counteracting	Progress on one target makes it more difficult to make progress on another
-3 Cancelling	Progress on one target automatically automatically leads to a negative impact on another

Figure 7. The 7-point scale developed by the International Council for Science (ICS)⁴¹⁾

Examples of methods using a qualitative scale to represent expert judgement



Stockholm Environment Institute: SDG Synergies https://tool.sdgsynergies.org/assets/docs/SDG_Synergies_Manual.pdf

EU JRC: KnowSDGs <https://knowsdgs.jrc.ec.europa.eu/>

Example of priority interlinkages identified to guide Swedish policy on SDGs implementation

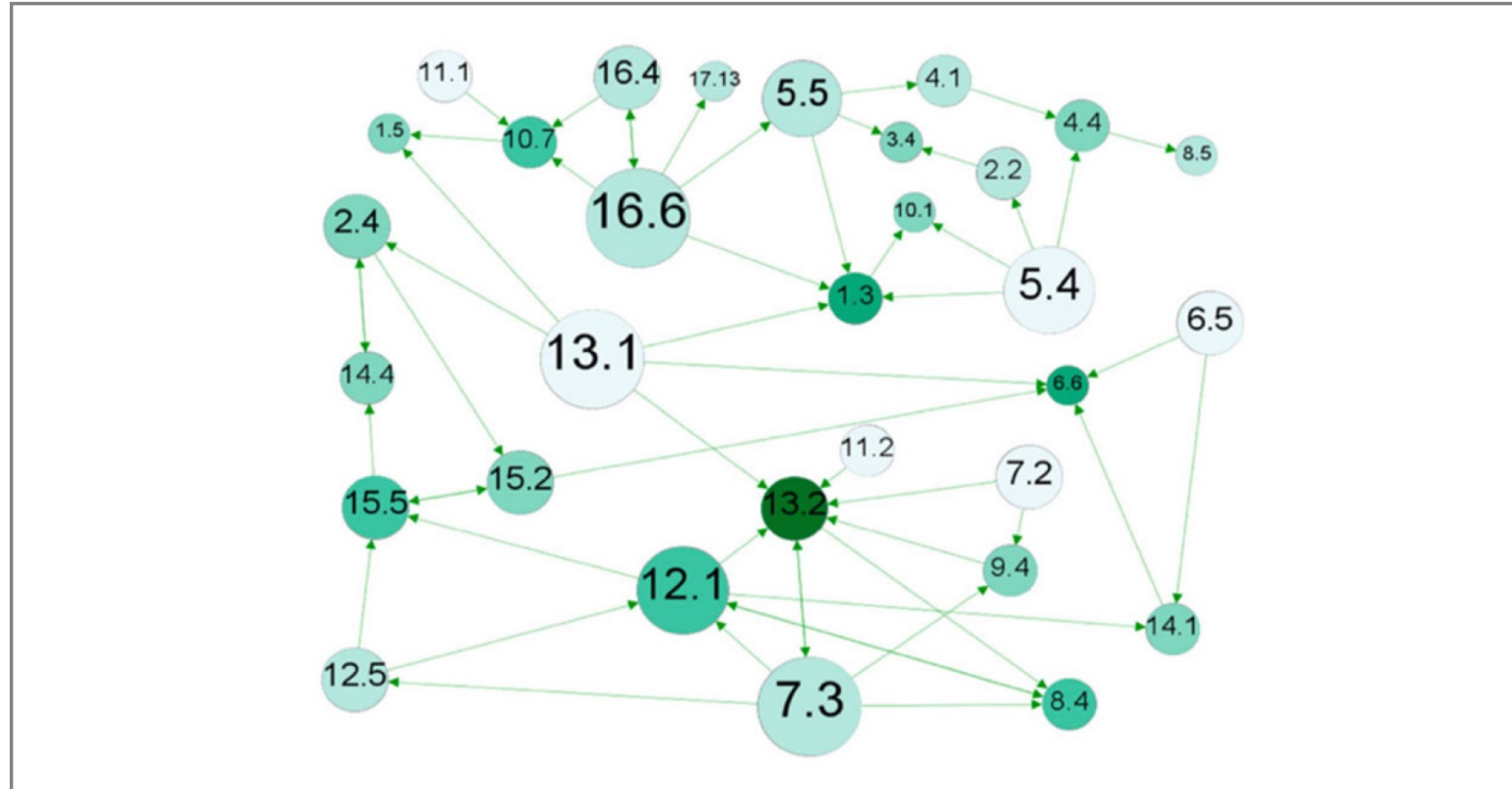
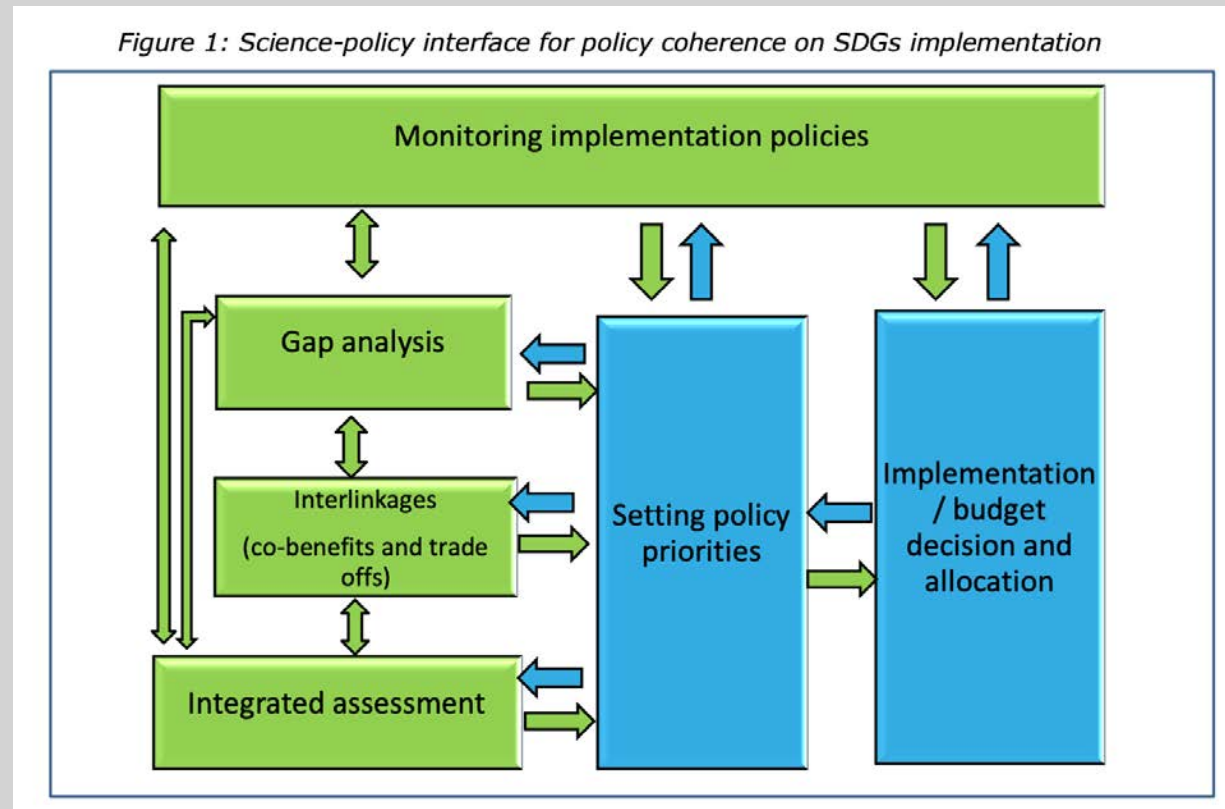


Figure 10. Sub-network of (+3) interactions from Weitz et al 2018⁶³). The size of the nodes (targets) is proportional to the degree of influence. The colour is proportional to the degree of being influenced by other nodes. [influential interlinkage has been identified between targets 16.6 and 5.5]

Size of nodes is proportional to the degree of influence
The colour represents the degree of being influenced

16.6 – transparent institutions, 13.1 – resilience & adaptive capacity, 7.3 – energy efficiency, 5.4 - public services and welfare protection, 5.5 – women as leaders and decision makers

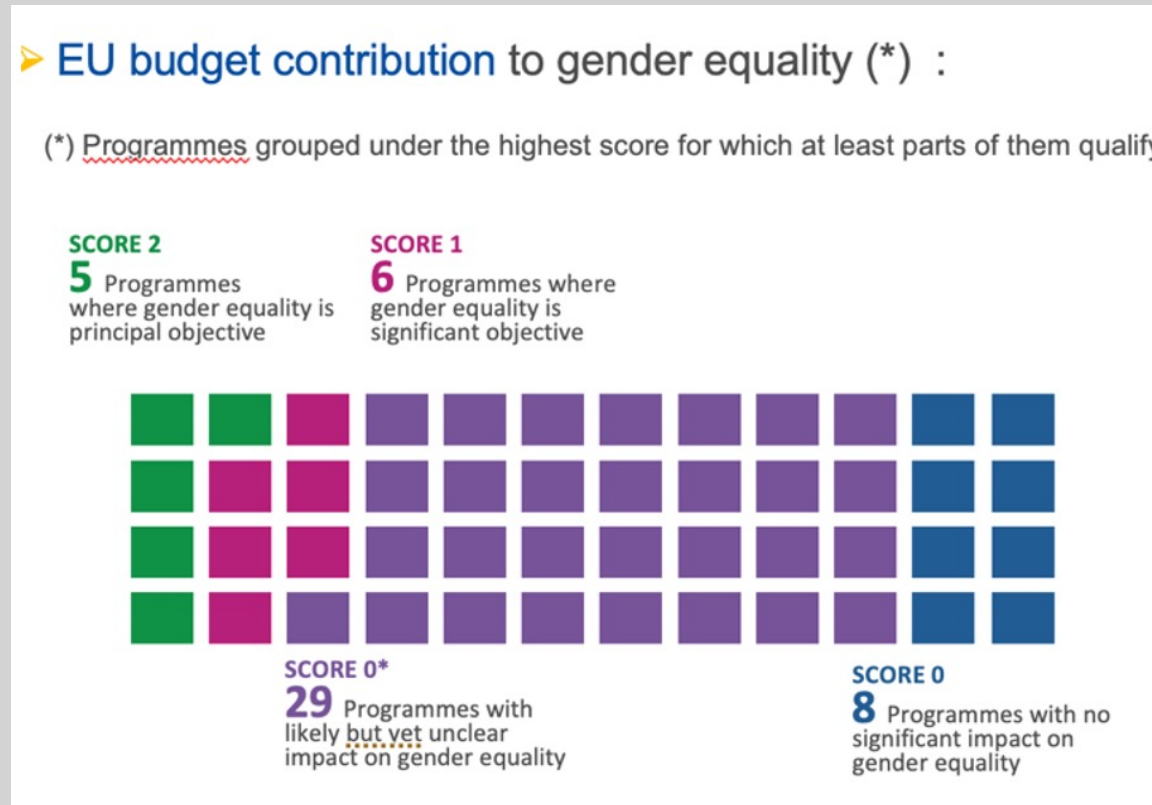
Example: Promoting science-policy coherence as a tool for interlinking SDGs for implementation in the EU



Only one source on gender equality consulted

Gender mainstreaming policy not included

Policy coherence on SDGs requires integrating gender mainstreaming across the policy framework



The EU is failing to integrate gender mainstreaming across science-policy intersections and into SDG related policies and budgets, e.g., energy transition, Green Deal

Example of a system-level impact analysis of implementing SDG5 as a priority

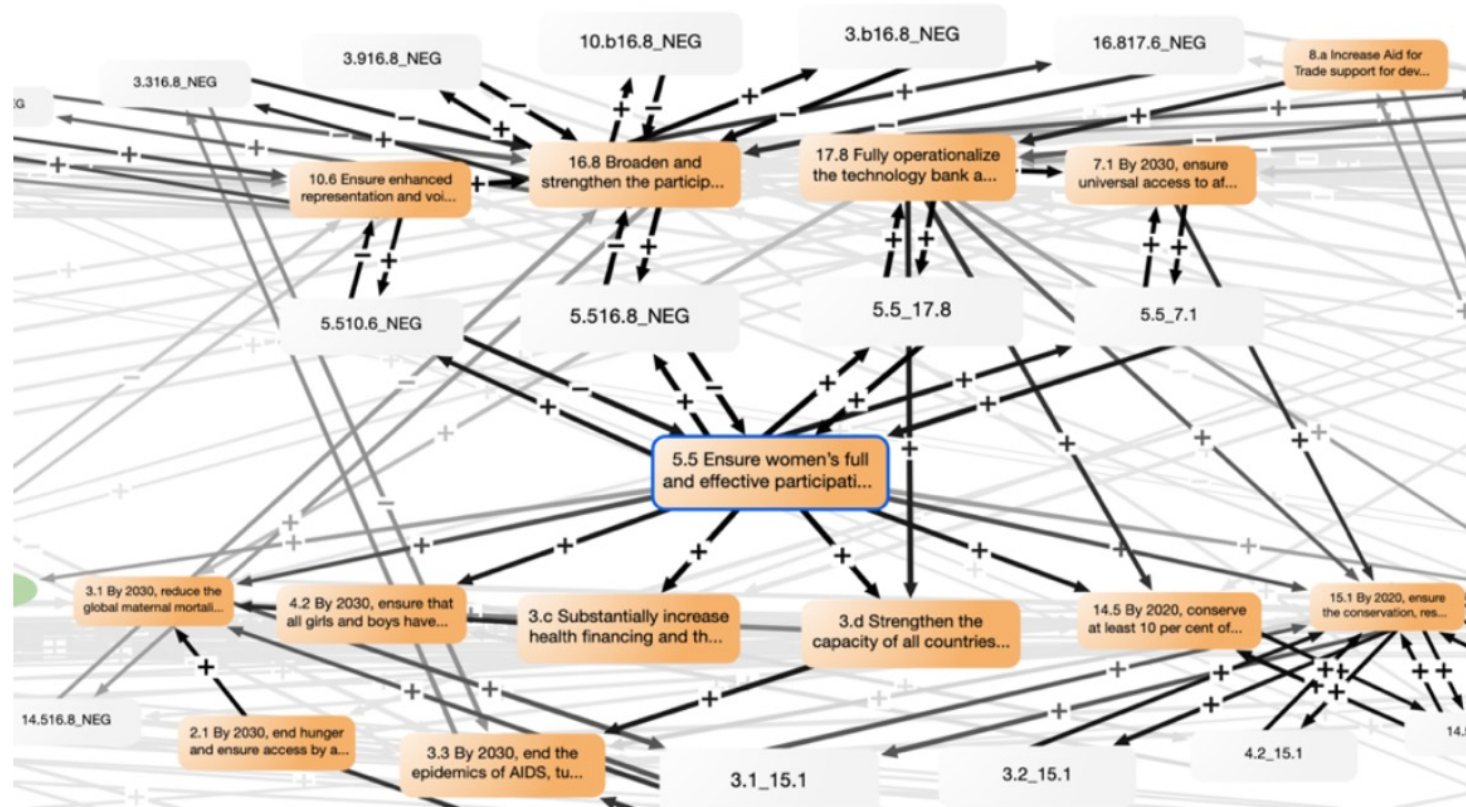
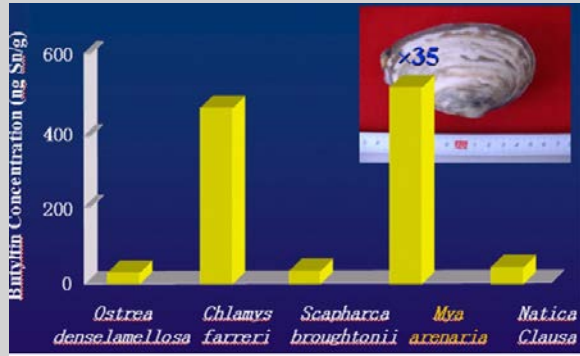


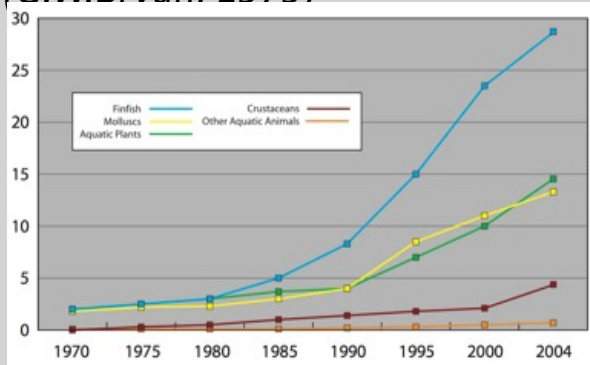
Figure 6. Example of system-level interconnections among Targets based on policy scenarios⁵⁷

Promoting gender analysis of interlinkages at ecosystem level

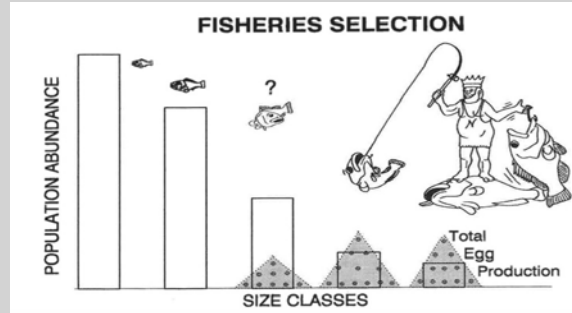
SDG 14: Sustainability through the gender/sex lens



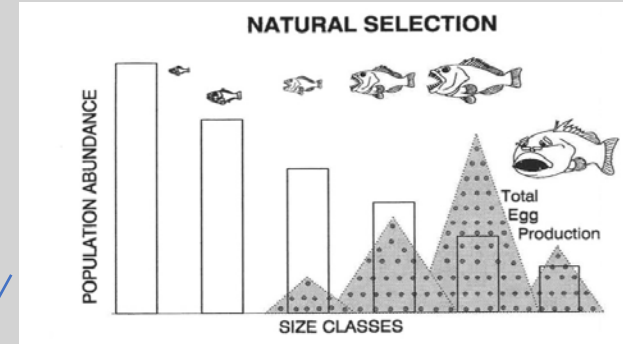
Bioaccumulation of marine pollutants (e.g. microplastics) impact on reproduction (male/female balance), interaction dynamics & biodiversity (G.W.Brvan. 1979)



Aquacultures: either the male or the female grow bigger and faster: how to control this safely without chemicals?

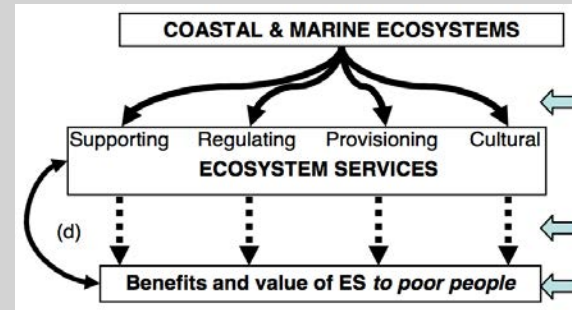


Reproductive success is important for managing fish stocks. Current policies fail to consider impact of sex



Old female fish produce lots of high-quality eggs, but fishing policy advises taking big fish out and leaving young in J.A. Bohnsack, 2014

Relevant to: SGD1; SDG2, SGD3; SGD5; SGD8; SGD17

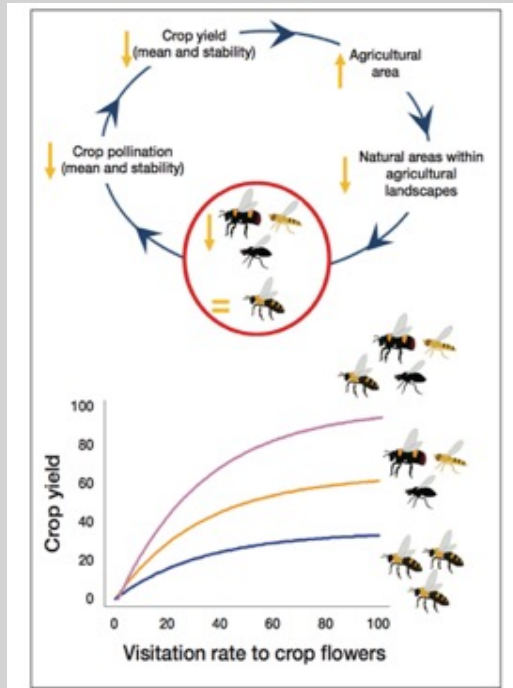


Empowering women through ecosystem services & value chains protects livelihoods and the ecosystems (WorldFish, 2008)

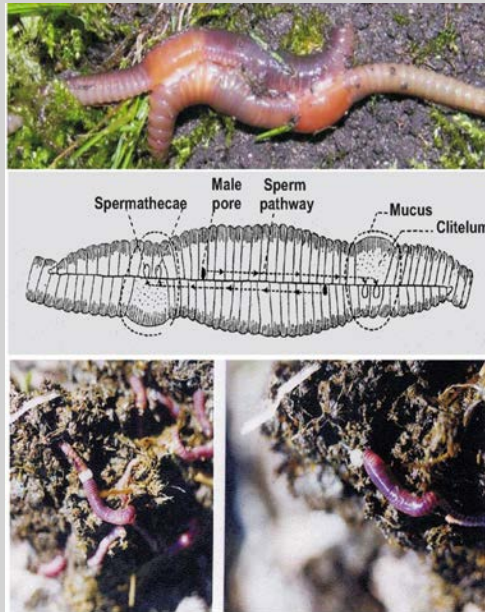


Dangers of using hormones to change sex of farmed fish (tilapia) which human then consume

SDG 15 through the sex/gender lens



Pollinators improve yields and quality of plant food. More pollinators means less chemicals. Only two percent of wild bee species pollinate 80 percent of bee-pollinated food crops!
https://www.ecpa.eu/sites/default/files/Pollinators%20brochure_B%C3%A0T2.pdf

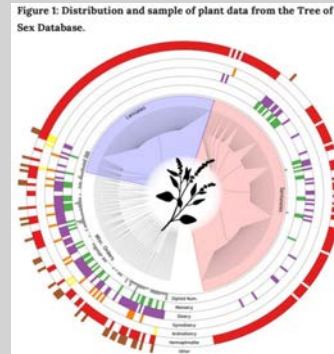


Earthworms form the biggest soil biomass. They also can reproduce sexually (important for genetic diversity). They are critical for terrestrial ecosystems by significantly affecting soil's physical, chemical and biological properties

J. Domínguez & A. Velando, *Applied Soil Ecology* 69 (2013) 21–27

VOICES COST Summer School, 6 July 2023

Relevant to: SDG1, SDG2, SDG3, SDG5, SDG8; SDG13; SDG15



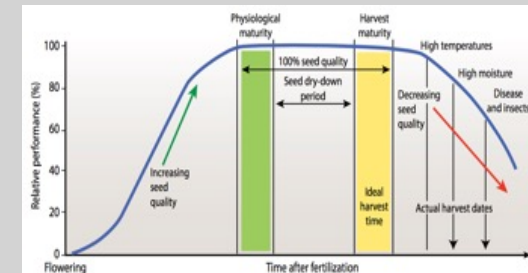
Reproduction systems in plants are very sensitive to environmental stresses
<http://www.nature.com/articles/sdata201415>



Understanding pathogen resistance of male and female flowers can ensure healthy crops without artificial insecticides (A Stephenson, 2012)



Sex determination in flowering food plants – e.g. the multi-use kokum tree: distinction between male and female plants can not be done until it flowers at 10-12 years
 K.S. Thatte, 2012



Ensuring quality of maize seed after fertilization can improve plant resilience (R. Gu et al 2017)

Interconnecting the 32 targets from 14 Goals that share in their text the keyword “access”

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.

3.8 Achieve universal health coverage, including financial risk protection, **access** to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all.

4.3 By 2030, ensure equal **access** for all women and men to affordable and quality technical, vocational and tertiary education, including university

6.1 By 2030, achieve universal and equitable **access** to safe and affordable drinking water for all.

9.3 Increase the **access** of small-scale industrial and other enterprises, in particular in developing countries, to financial services, including affordable credit, and their integration into value chains and markets.

Etc.,

Common methods used to analyze SDGs and the different gender perspectives

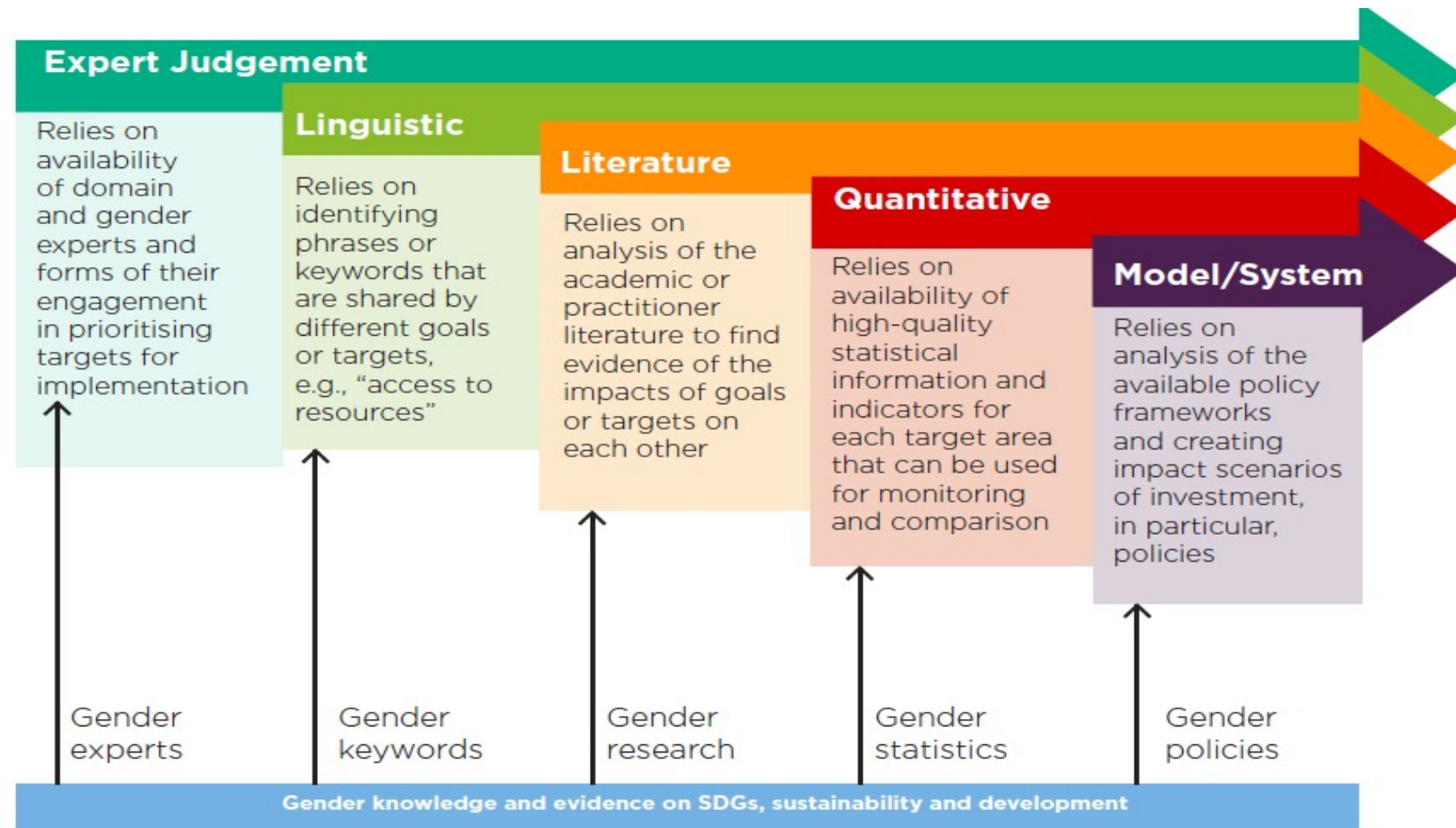


Figure 2: Five commonly used methodological approaches developed to support analysis of interactions between different goals and targets⁴⁸ and how they can be made more responsive to gender concerns.

Sustainability scientists have been devising many possible ways to interconnect SDGs so that groups of targets could be delivered together

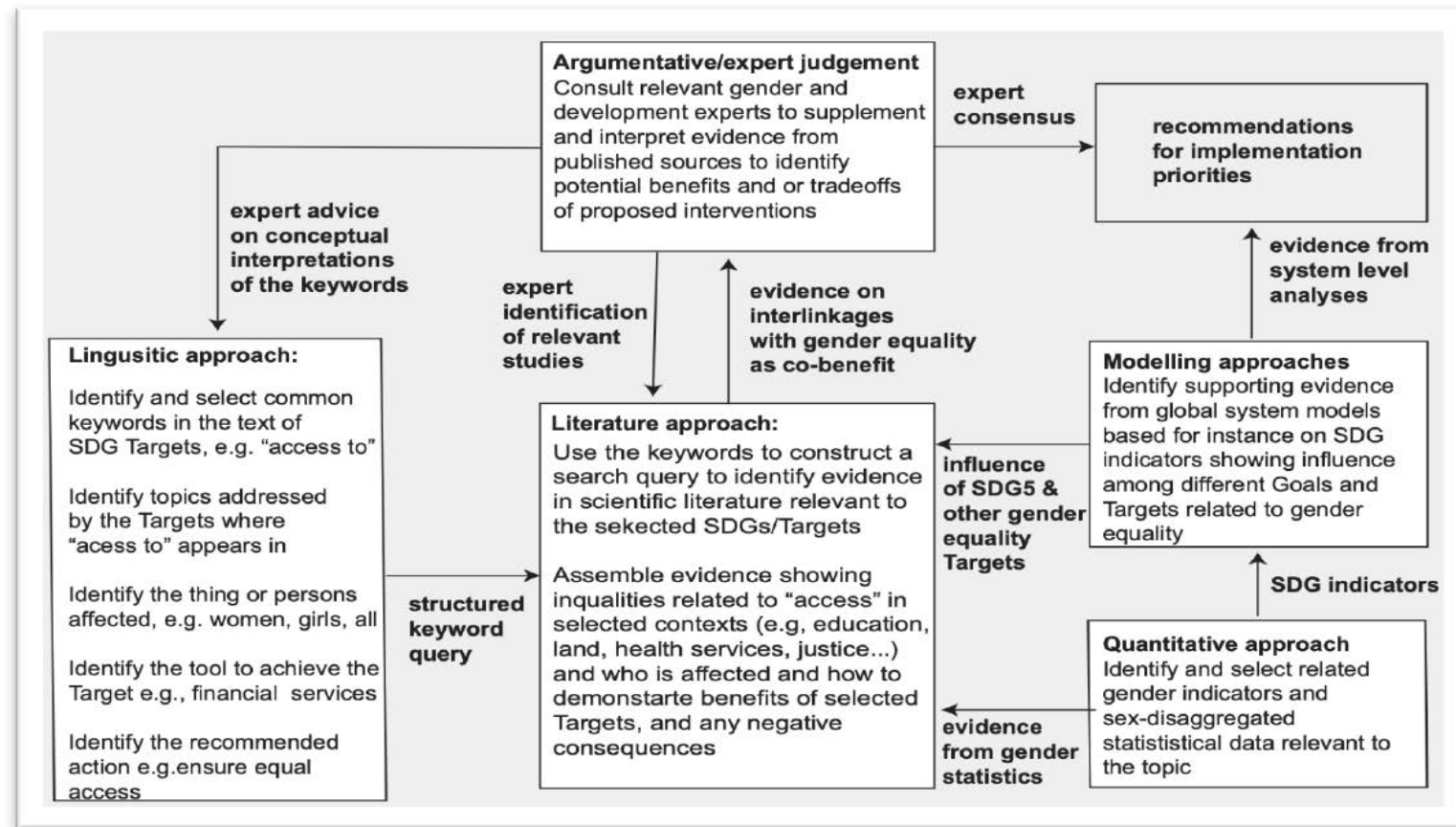
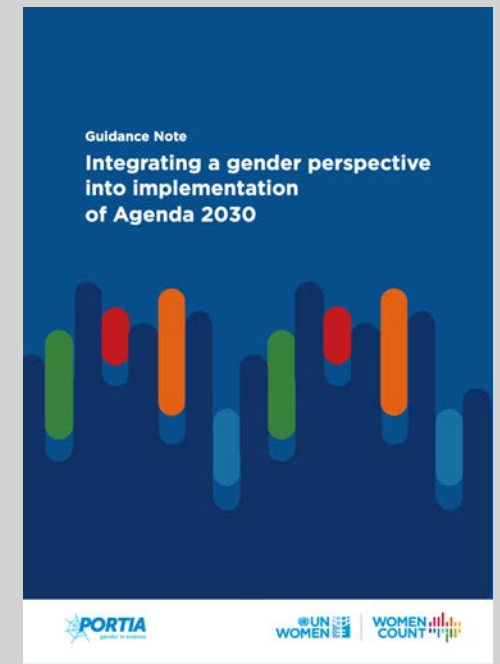
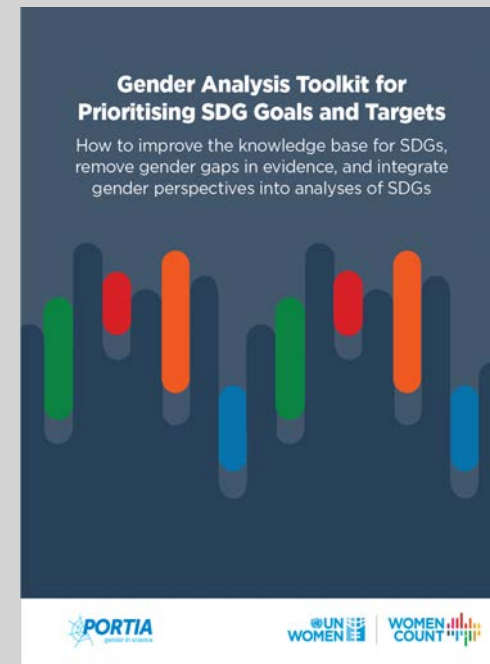
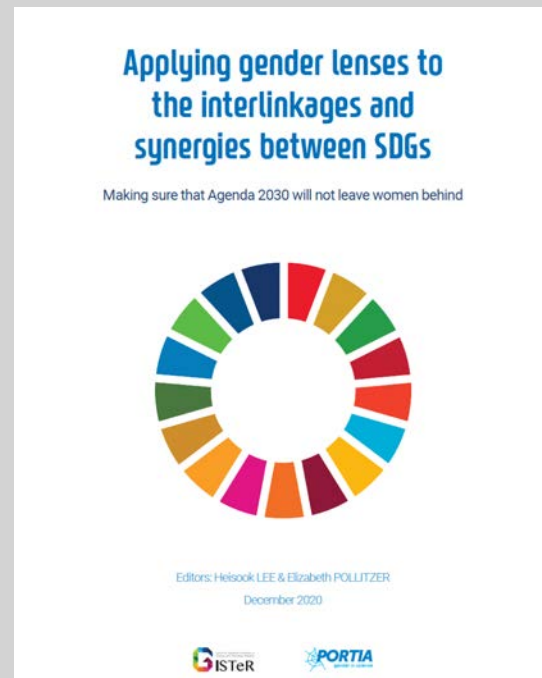
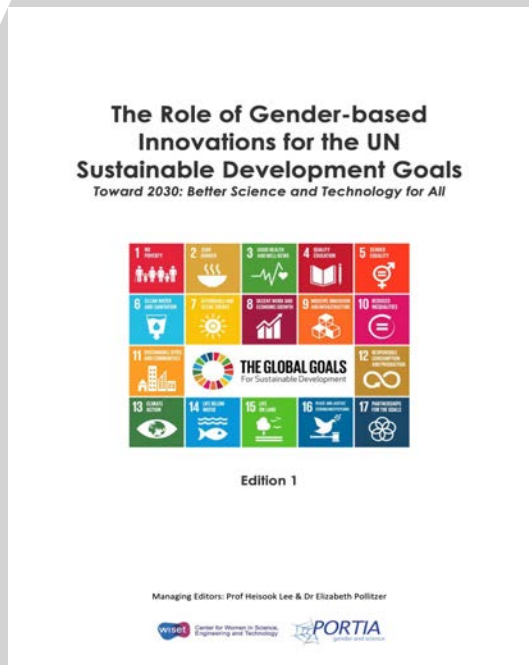


Figure 7. Combining the five most common approaches to effectively interlink SDG Targets for Implementation by maximising access to evidence on gender aspects

Where to find more information

<https://portiaweb.org.uk/resources.html>



Thank you