

Mapping interactions between Sustainable Development Goals

Pilot study



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Principles for the Sri Lanka pilot study

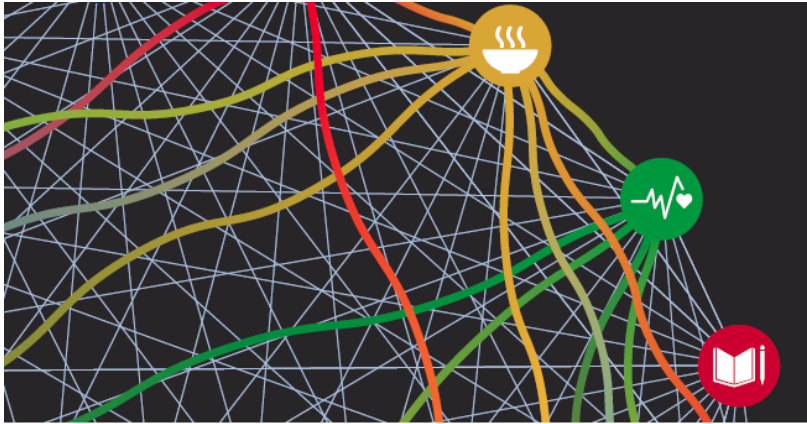
- Co-Creation & Government-led process.
- Responsiveness to the national policy community's priorities.
- Support interagency dialogue on SDG targets.
- Support Agenda 2030 policy coherence.
- Added value for national policy planning and budgeting.



Why care about multi-stakeholder partnerships?

1. Coherent policies and strategies are more effective.
2. If you want policy coherence, you need to know how the pieces fit together.
3. Inducing valuable policy dialogue and learning processes.
4. Knowing your friends and foes – who should you cooperate with and who do you need to negotiate with?
5. More bang for your buck – where can you get the most impact and knock-on effects?





A GUIDE TO SDG INTERACTIONS: FROM SCIENCE TO IMPLEMENTATION



COMMENT

ministries) and ocean-management agencies (such as the FAO, the UN Environmental Programme, regional fisheries management organizations, and ministries of fisheries and the environment).

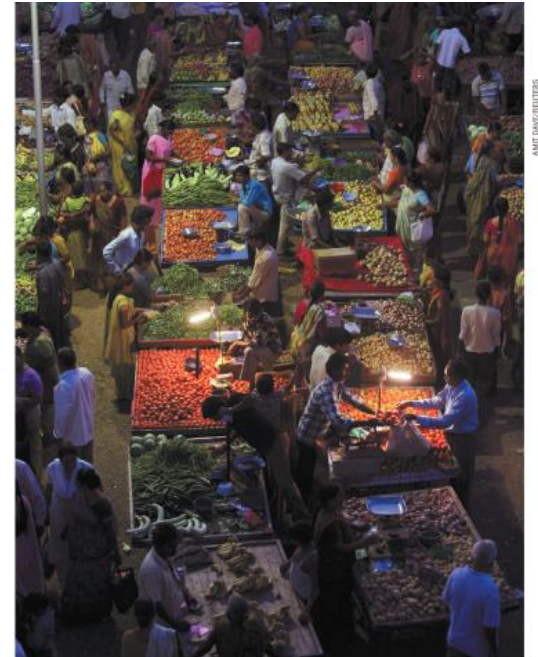
Mitigating losses of biodiversity and income have been at the heart of fisheries-management policies. In our view, there should be a much stronger emphasis on human health. This would mirror recent shifts in agricultural policy that respond to rising burdens of diet-related diseases.

These policy changes are possible. We believe that improvements in fisheries management and marine conservation can serve as nutritional delivery mechanisms. A meta-analysis of nearly 5,000 fisheries worldwide found that applying sound management reforms to global fisheries could increase catch by more than 10%¹⁵. Without these changes, the health of the ocean is at risk. ■

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Solar lights are used by vendors in rural western India, where lack of electricity has stymied development.

Map the interactions between Sustainable Development Goals

Måns Nilsson, Dave Griggs and Martin Visbeck present a simple way of rating relationships between the targets to highlight priorities for integrated policy.

Next month in New York, the United Nations' 2030 Agenda on Sustainable Development will have its first global progress review. Adopted by the UN General Assembly in 2015, the agenda represents a new coherent way of thinking about how issues as diverse as poverty, education and climate change fit together; it entwines economic, social and environmental targets in 17 Sustainable Development Goals (SDGs) as an 'indivisible whole'.

Implicit in the SDG logic is that the goals depend on each other — but no one has specified exactly how. International negotiations gloss over tricky trade-offs. Still, balancing interests and priorities is what policymakers do — and the need will surface when the goals are being implemented. If countries ignore the overlaps and simply start trying to tick off targets one by one, they risk perverse outcomes. For example, using coal to improve energy access (goal 7) in Asia

Seven-point scale for interactions

GOALS SCORING

The influence of one Sustainable Development Goal or target on another can be summarized with this simple scale.

Interaction	Name	Explanation	Example
+3	Indivisible	Inextricably linked to the achievement of another goal.	Ending all forms of discrimination against women and girls is indivisible from ensuring women's full and effective participation and equal opportunities for leadership.
+2	Reinforcing	Aids the achievement of another goal.	Providing access to electricity reinforces water-pumping and irrigation systems. Strengthening the capacity to adapt to climate-related hazards reduces losses caused by disasters.
+1	Enabling	Creates conditions that further another goal.	Providing electricity access in rural homes enables education, because it makes it possible to do homework at night with electric lighting.
0	Consistent	No significant positive or negative interactions.	Ensuring education for all does not interact significantly with infrastructure development or conservation of ocean ecosystems.
-1	Constraining	Limits options on another goal.	Improved water efficiency can constrain agricultural irrigation. Reducing climate change can constrain the options for energy access.
-2	Counteracting	Clashes with another goal.	Boosting consumption for growth can counteract waste reduction and climate mitigation.
-3	Cancelling	Makes it impossible to reach another goal.	Fully ensuring public transparency and democratic accountability cannot be combined with national-security goals. Full protection of natural reserves excludes public access for recreation.



Network Analysis

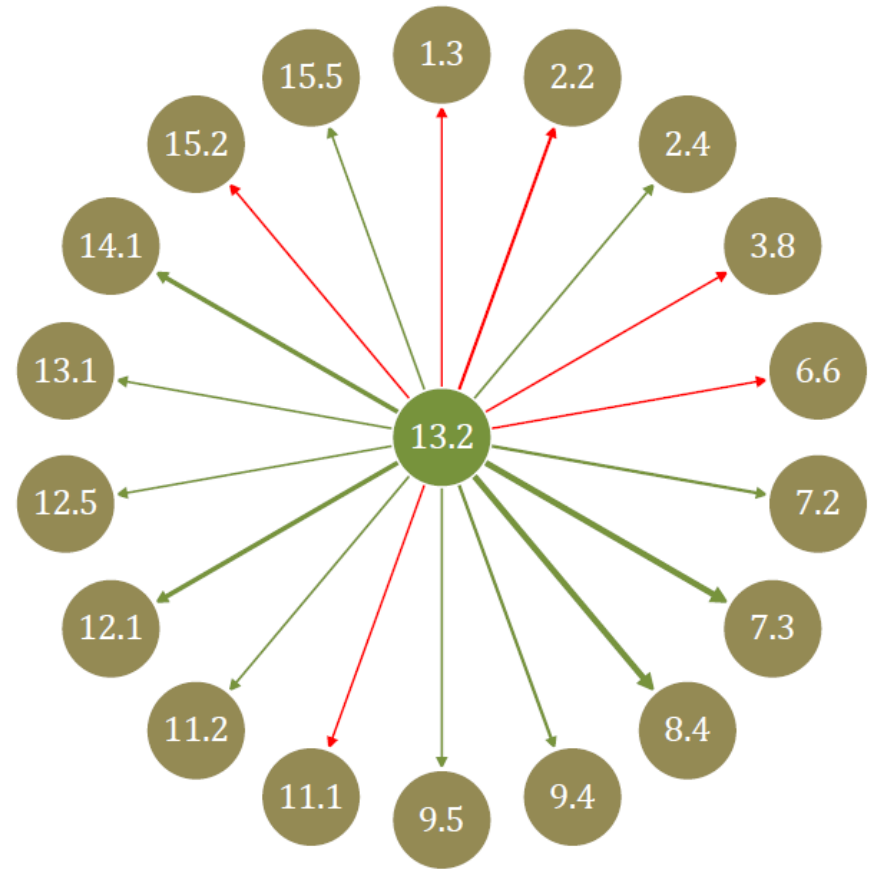
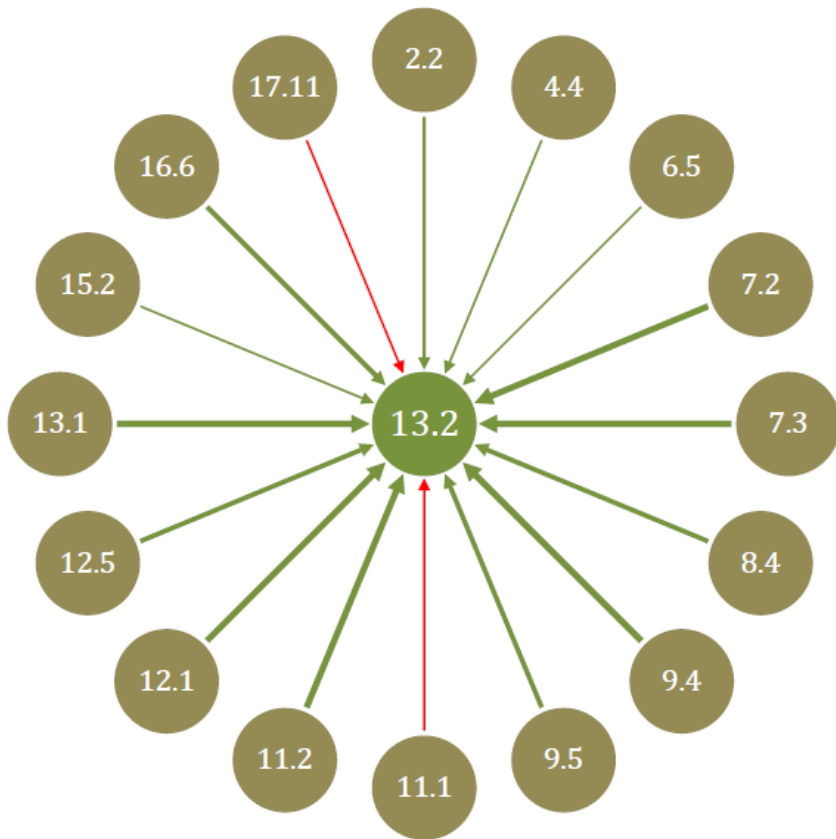
A quantitative network analysis on the scores produced provide an analysis of interactions between targets and captures both direct and indirect impacts on SDG targets. It provides a more robust ranking of the most impactful targets, and develops a useful visualisations of the relationships between targets.

The Interactions Matrix: First Order Impacts

Influenced Targets

	1.3	1.5	2.2	2.4	3.4	3.8	4.1	4.4	5.4	5.5	6.5	6.6	7.2	7.3	8.4	8.5	9.4	9.5	10.1	10.7	11.1	11.2	12.1	12.5	13.1	13.2	14.1	14.4	15.2	15.5	16.4	16.6	17.11	17.13	SUM	
Influencing Targets	1.3																																		25	
	1.5																																		26	
	2.2																																		13	
	2.4																																		23	
	3.4																																		4	
	3.8																																		11	
	4.1																																		17	
	4.4																																		30	
	5.4																																		24	
	5.5																																		31	
	6.5																																		22	
Most positively influencing targets	6.6																																		9	
	7.2																																		12	
	7.3																																		20	
	8.4																																		40	
	8.5																																		29	
16.6 Effective institutions	9.4																																			28
	9.5																																			29
	10.1																																			11
	10.7																																			15
	11.1																																			13
12.1 Sustainable consumption/production	11.2																																			21
	12.1																																		43	
	12.5																																		29	
	13.1																																		28	
8.4 Resource efficiency	13.2																																		13	
	14.1																																		13	
	14.4																																		13	
	15.2																																		12	
	15.5																																		16	
	16.4																																		19	
	16.6																																		51	
	17.11																																		-9	
	17.13																																		11	
SUM	26	37	16	32	21	14	15	24	15	15	20	20	4	15	26	27	25	17	28	22	17	21	29	18	30	29	21	13	20	28	11	17	-2	21		

Both directions



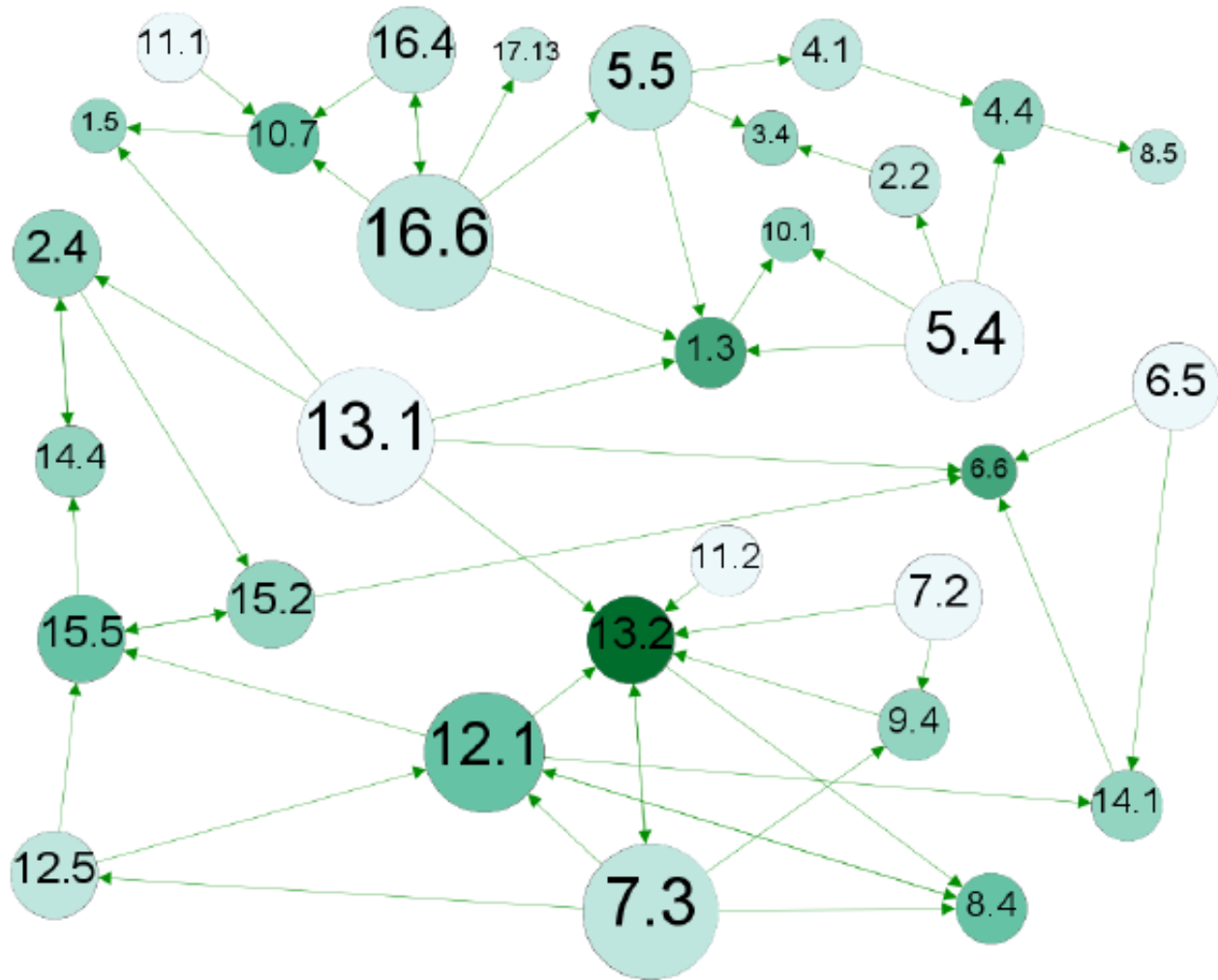


Fig 4: Sub-network of indivisible (+3) interactions. Directed as shown by arrows. The size of the nodes (targets) are proportional to the degree of influence (out-degree) with bigger nodes representing more influential nodes. The color is proportional to the degree of being influenced with darker color for nodes more influenced by other nodes

Identifying the most influential targets

RANK	TARGET	NET INFLUENCE
1	16.6 <i>Effective institutions</i>	567
2	12.1 <i>Sustainable consumption/ production</i>	513
3	8.4 <i>Resource efficiency</i>	509
4	12.5 <i>Waste</i>	381
5	9.5 <i>Research/development</i>	364,5
6	4.4 <i>Technical/vocational skills</i>	364
7	5.5 <i>Women's participation</i>	362,5
8	8.5 <i>Employment</i>	351
9	9.4 <i>Infrastructure</i>	349,5
10	7.3 <i>Energy efficiency</i>	322

How is the approach useful for policy-makers?

- Identify “accelerator interventions” and critical clashes.
- Identify resource effective options:
 - Potentially dedicate more resources than planned to the most impactful targets (both positive and negative).
 - Potentially dedicate less resources than planned to the most impacted targets.
- Inducing partnership policy dialogue and partnerships.
- Greater guidance for coherent policies.
- Priority setting - identify subsets of targets that unlock progress in many other targets
- Mitigation in areas where critical trade-offs exist;
- Partnership coordination, learning and dialogue.
- Knowledge to support the development of robust and coherent strategies for comprehensive SDG implementation even with limited data.

Key learning from pilot, and for business

- Ensure the working group's ownership of the overall process.
- Ensure that selected targets are highly relevant to the national context and national policies.
- Ensure that the three dimensions of sustainability are covered by the selection.
- Plan for a number of targets that will be manageable in the scoring process.