

Session 2.1 – Thematic Group Assignments and Profiling of 17 SDG Goals and Targets

S2.1 Group assignment

Group 1 SDG cluster goals: Ms. **Gantigmaa** 6, 16, 17, 7

Group 2 SDG cluster goals: Mr. **Temuujin** 4, 1, 2, 3, 5

Group 3 SDG cluster goals: **Mrs. Bayasgalan** 13, 15, 14,

Group 4 SDG cluster goals: **Mr.Tumendemberel** 12, 8, 9, 10, 11



S2.2 Group Discussions (optional)

Group 1 SDG cluster goals: 1, 2, 3

Group 2 SDG cluster goals: 4, 5, 10

Group 3 SDG cluster goals: 8, 9, 12

Group 4 SDG cluster goals: 6, 14, 15

Group 5 SDG cluster goals: 7, 11, 13

Group 6 SDG Cluster Goals: 16, 17



Methodology for Profiling of 17 SDG Goals and Targets (Worksheet 2.1)

Worksheet 2.1 includes...

- **SDG SPOT ANALYSIS:** Hotspots, Bright Spots, Emerging For SDGs (in clusters)
- **INTEGRATIVE SDV GOAL STATEMENTS** for SDGs that link to *addressing cross-sectoral priorities and implementation of any of 3MEAs (UNFCCC, CBD, CCD)*
- **GOVERNMENT INSTITUTIONAL SDG LINKS**, through MANDATES, who can contribute working on the SDG profiles.
- **SDGS AND MEA LINKAGES**

SDG Cluster Spot Analysis

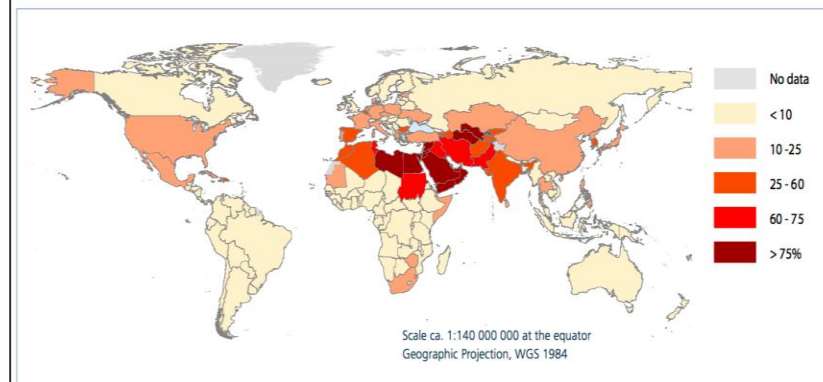
- **Hotspots, Bright spots and Emerging Issues** analysis is used as a pre-cursor to developing more detailed sustainability policy and strategy formulation.
- The findings from this analysis will provide a relatively comprehensive understanding of the various systemic factors linked to achieving Mongolia's sustainable development vision 2030 (SDV 2030).
- **Proposed Methodology:** analysis is a methodological framework that allows for the rapid assimilation and analysis of a range of information sources, including Rapid Strategic Environmental Assessment (RSEA), Environmental Performance Review (EPR), other environmental, social and economic data frameworks (e.g. SEEA), and expert opinion and stakeholder concerns.
- **A Spot Analysis should be carried out for each of the 17 SDGs**

Hotspots Example

- **Hotspot** = A Hotspot is any issue or factor that whose data shows that it is trending in an opposite direction to sustainable development, especially for a significant period of time, which could be increasing in speed and magnitude as well. Hotspots would also be defined by a negative trending factor that is cross-cutting to other SDGs and sectors.

Example: Groundwater resources continue to be used beyond sustainable limits, therefore agricultural production in the region will be threatened, which is the main source of income for the majority of the region's population.

Figure 2.2 Percentage of renewable water resources withdrawn



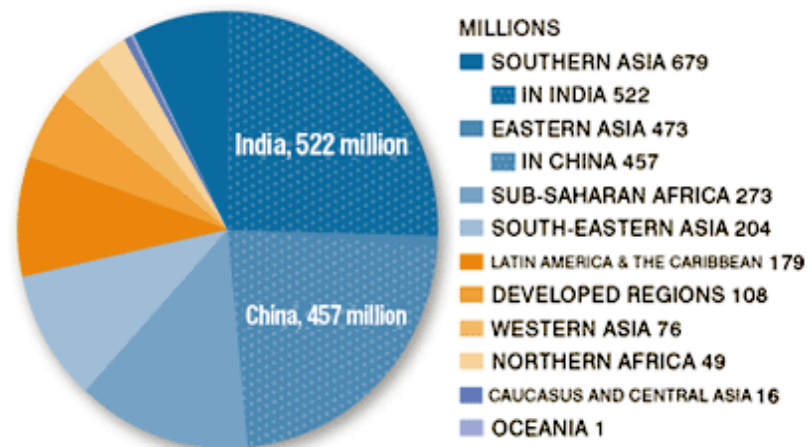
Source: FAO (2015a, http://www.fao.org/nr/water/aquastat/maps/MDG_eng.pdf).

Bright Spot Example

Bright spot = A Bright Spot is an issue or area which is trending in a sustainable direction, and has been over a specified period of time. With regards to sustainable development, bright spots are points of optimism, with obvious 'drivers of positive change', including supporting and facilitating resources and capitals available locally, nationally and regionally, including human, financial, environmental and social capitals.

Example: In 2015, nearly 94% of the region had access to an improved drinking water supply. This number increased by 20 % in South and South-West Africa and by 19% in Southeast Asia between 1990 - 2015

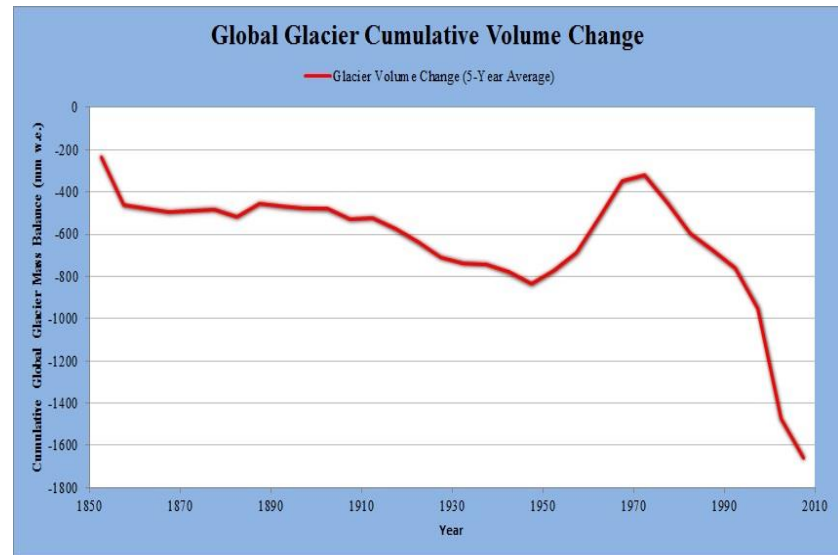
Almost half of the two billion people who have gained access to drinking water since 1990 live in China or India



Emerging Issue Example

Emerging Issues = An Emerging issue is any issue which seems to be recently appearing on the visual radar of scientific, policy and/or the general public attention. An Emerging issues signifies the novelty or intensification of certain issues, with fresh understanding of their causes or consequences and/or the development of new management options, or the identification of issues that have gone previously unrecognized.

Example: The decline of glacier lakes is affecting Asia's major river basins, where 1.2 billion people live.



Worksheet 2.1: HOTSPOTS, BRIGHT SPOTS and EMERGING ISSUES

Instructions:

- For each of the SDGs within the cluster, identify the Hotspots, Bright Spots and Emerging issues. Each SDG should be considered through all the goals' targets.
- Note:** In identifying the Hotspots, Bright Spots, and Emerging Issues, you should refer to the EPR results as well as the comparative indicator data for the 30 questions from the RSEA (real data).

Sustainable Development Goal: _____

HOTSPOTS

No.	Hotspot Issue Description	Reason considered a hotspot relative to the SDG	Perceived Level of overall importance in achieving SDG (low, medium, high)
1			
2			
3			
4			
5			

Worksheet 2.1. Integrative SDG GOAL STATEMENTS

Instructions

Propose a series of SDG Goals Statements from SDV 2030, related to each selected thematic SDG clusters. These statements should *commit in addressing cross-sectoral priorities, implement 3MEAs (UNFCCC, CBD, CCD) and SDGs, reflect on EPR /RSEA findings)* . **Pull these initiatialy from SDV 2030 document.**



SDG Goal Statement	Linked Target
Protect at least 50 percent of the water resources, river streams and water sources under special protection, build at least two national level large water tanks to collect waters from precipitation and surface flows, and draw a medium-scale hydrology map for 15 percent of the territory to be available for agriculture and domestic utilization.	6.1, 6.6, 15.1

Worksheet 2.1 GOVERNMENT INSTITUTIONAL SDG LINKS and MANDATES

Instructions

- Identify list of government Institutions, think-tanks whose mandates align/link with SDGs/ targets and could be engaged in leading/peer-review of SOM chapters

Target #	Relevant Government Institutions and Agencies with linking Mandates to this target (provide a brief description of the linking mandate)
SDG 6.4	Ministry of Agriculture
SDG , 6.3 6.6	Ministry of Environment and Tourism
SDG 6.1	Ministry of Health

Session 2.2 Profiling of 17 SDG Goals and Targets - Group Discussions

Groups should discuss and record your group's ideas on the following:

- SDG profiling methodology with hotspots, bright spots, emerging Issues using RSEA & EPR, recommendations for each SDG, clarify linkages of SDGs (targets) with MEAs
- Propose SDG cluster goal statements to achieve SDV with integrated policy approach
- Identify list of government Institutions, think-tanks whose mandates align/link with SDGs/ targets and could be engaged in leading/peer-review of SOM chapters
- Record your discussion key points, goal statements and institutional peers.

50 Minutes



Session 3.2: Methodology Discussion – Identification of Policy Leverage Points SDG Interaction Scoring

Session 3.2 Group Discussions

Each of the 6 Groups should discuss and record your group's ideas on the following:

- Institutional arrangements (worksheet 3.1.1)
- Methodology for identification of policy leverage points
[worksheet 3.1]
- SDG target interaction scoring for understanding relationships and trade-off implications *[worksheet 3.2]*
- Revisit and revise if necessary the SDG cluster goal statements to achieve SDV and 3 MEAs

Leveraging policy entry points

The main question that we look to answer in a systems analysis is:

“How do we change the structure of systems to produce more of what we want and less of that which is undesirable?”

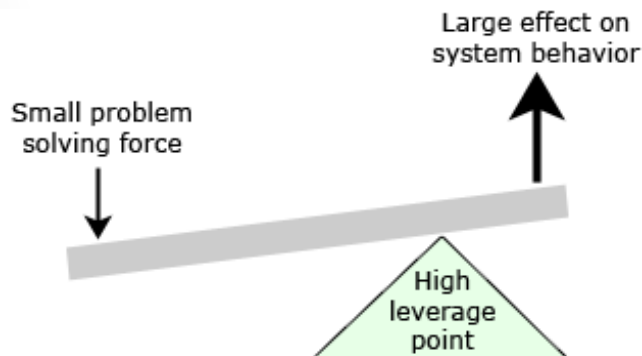


Systems Thinking & Leverage Points

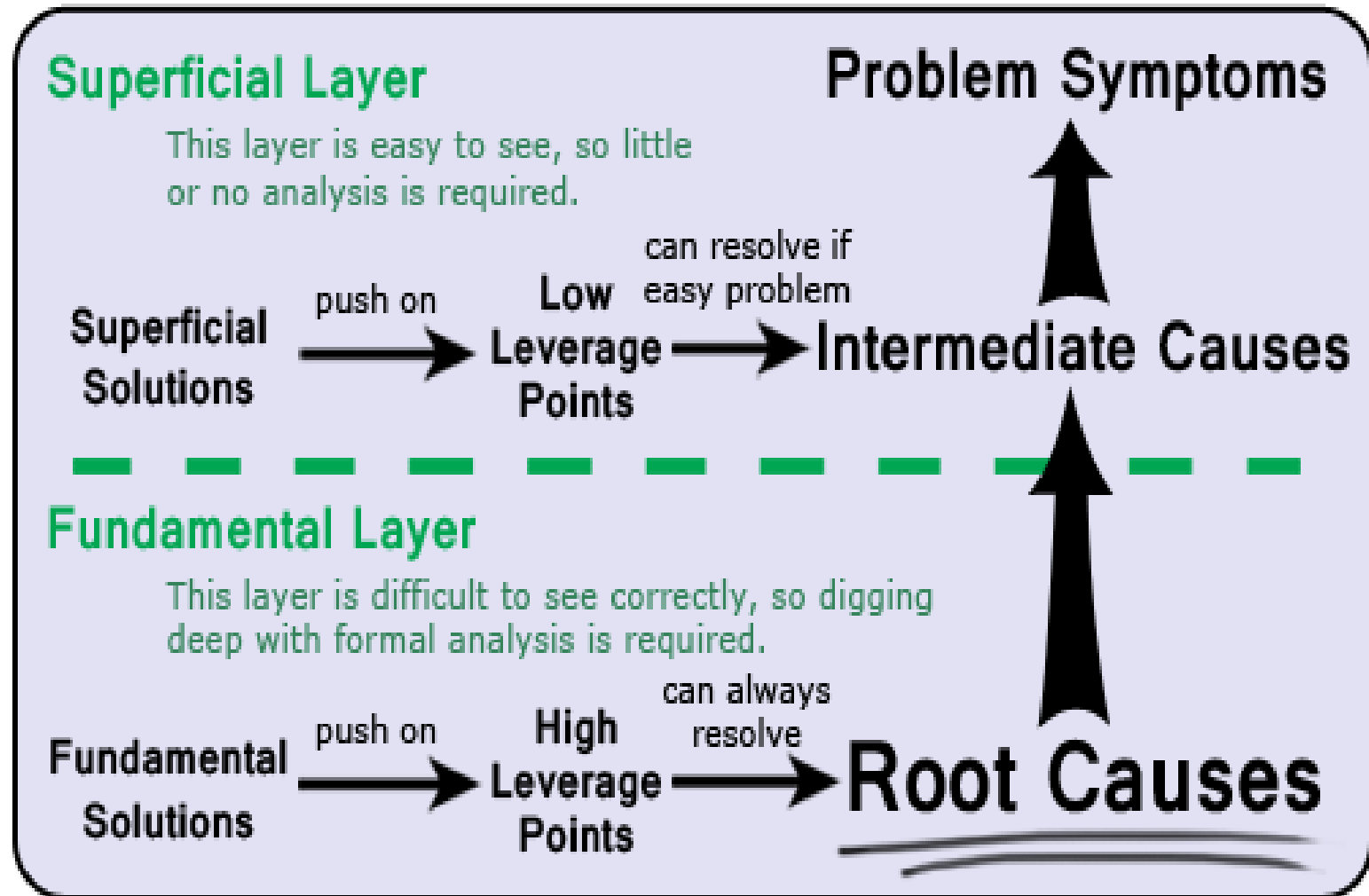
Systems thinking is a vantage point from which you see a whole, a web of relationships, rather than focusing only on the detail of any particular piece. Events are seen in the larger context of a pattern that is unfolding over time.

Leverage points are “places within a complex system where a small shift in one thing can produce big changes in everything.” They are, therefore, of immense interest to anyone seeking to affect change within our interconnected ecological, social and economic systems.

- Donella Meadows, Leverage Points

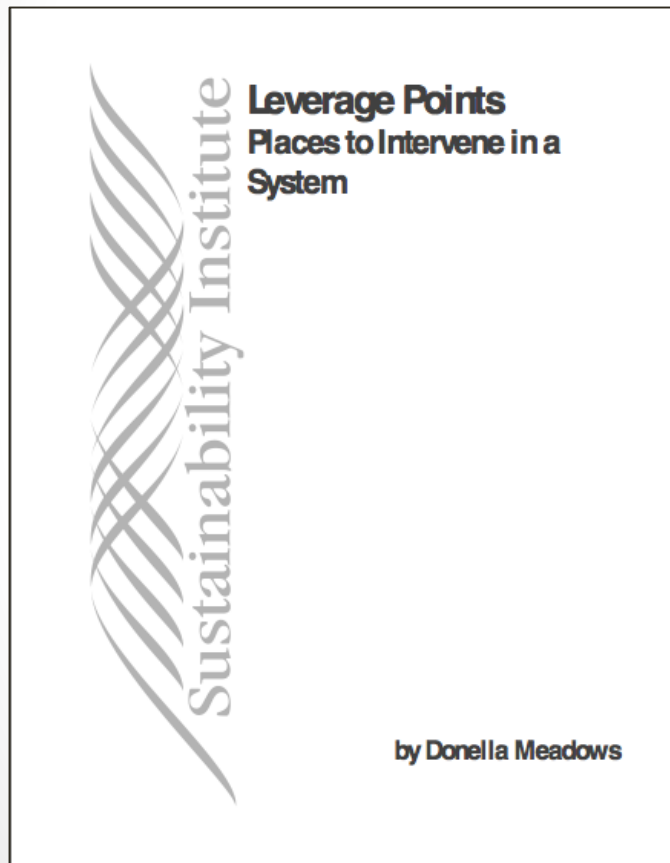


Low and High Impact Leverage



Methodology based on work of Donella Meadows:

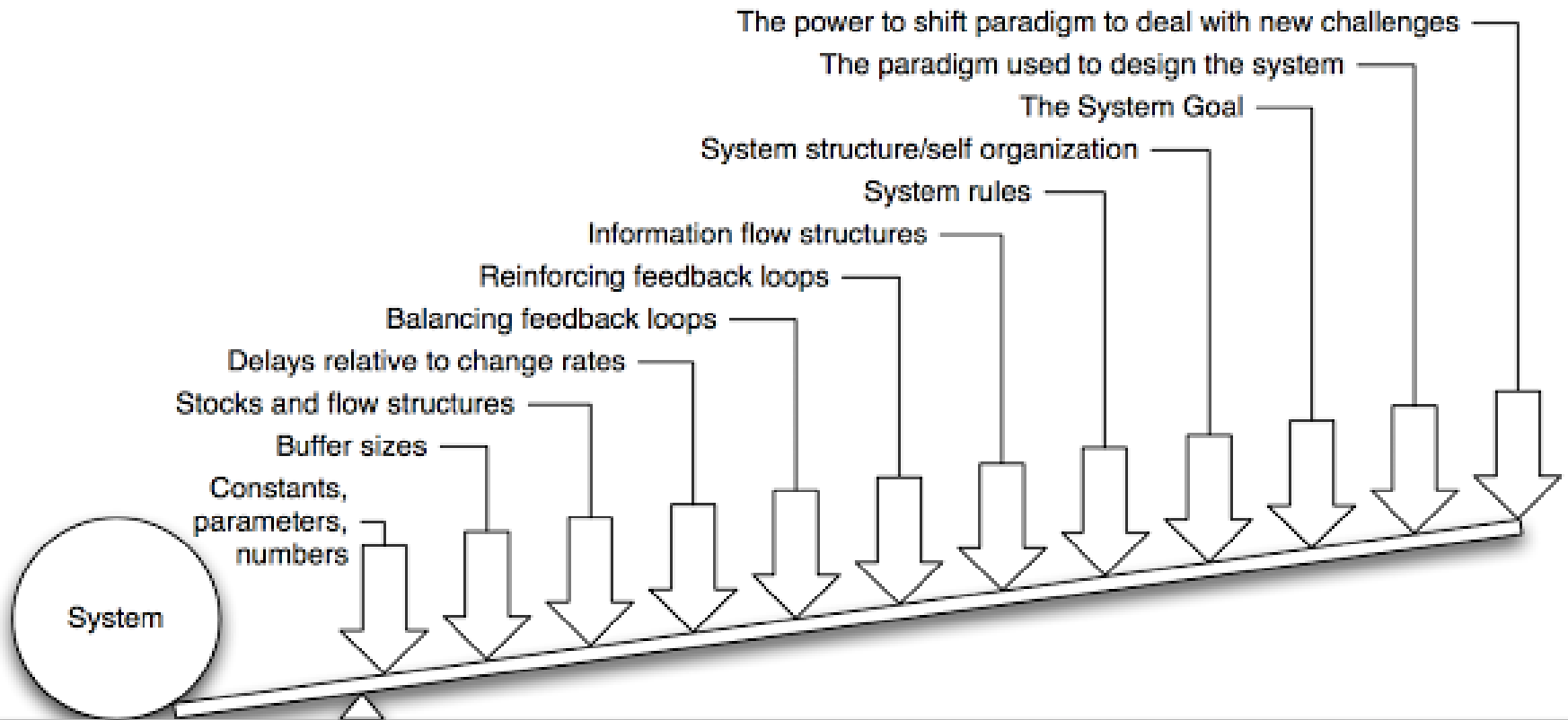
Leverage Points: Places to Intervene in a System



LEVERAGE POINT	TYPE	LEVER	AIM
12	Physical	Constants, parameters and numbers	Change the flow rates of system inputs and outputs, whether material, energetic or otherwise
11		The sizes of buffers, and other stabilising stocks, relative to their flows	Optimise stock/buffer size to maximise system resilience and efficiency
10		The structure of material stocks and flows, and nodes of intersection	Build the system right, rebuild it, or understand the system limits and don't exceed them
9	Informational	The lengths of delays, relative to the rate of system changes	Change the rate of system responses
8		The strength of negative feedback loops, relative to the impacts they are trying to correct against	Change the stabilising potential in the system (negative feedback loops, broadly speaking, are stabilising or corrective)
7		The gain around driving positive feedback loops	Change the gain (destabilisation or reinforcing potential) in the system
6		The structure of information flows	Explore and alter <i>who</i> has access to <i>what</i> information.
5	Social	The rules of the system	Understand and change what the rules are and who has power over them. Natural laws, constitutions and social agreements all fall into this category
4		The power to add, change, evolve or self-organise system structure	Nurture innovation, flexibility, variation, culture, creativity, collaboration: the adaptive capacity of the system
3		The goals of the system	Create and/or remove selection pressures on the system
2	Conscious	The mindset or paradigm out of which the system arises	Challenge the assumptions and values we hold to be true. Self-reflection, cultural variation, activism: it is from our paradigms about the nature of the world that our goals arise
1		The power to transcend paradigms	Recognise the limitations of our understanding and utilise this as a source of eternal flexibility, humility and learning

Source: "Leverage Points: Ways to Intervene in a System," by Donella H. Meadows. Available from www.sustainer.org

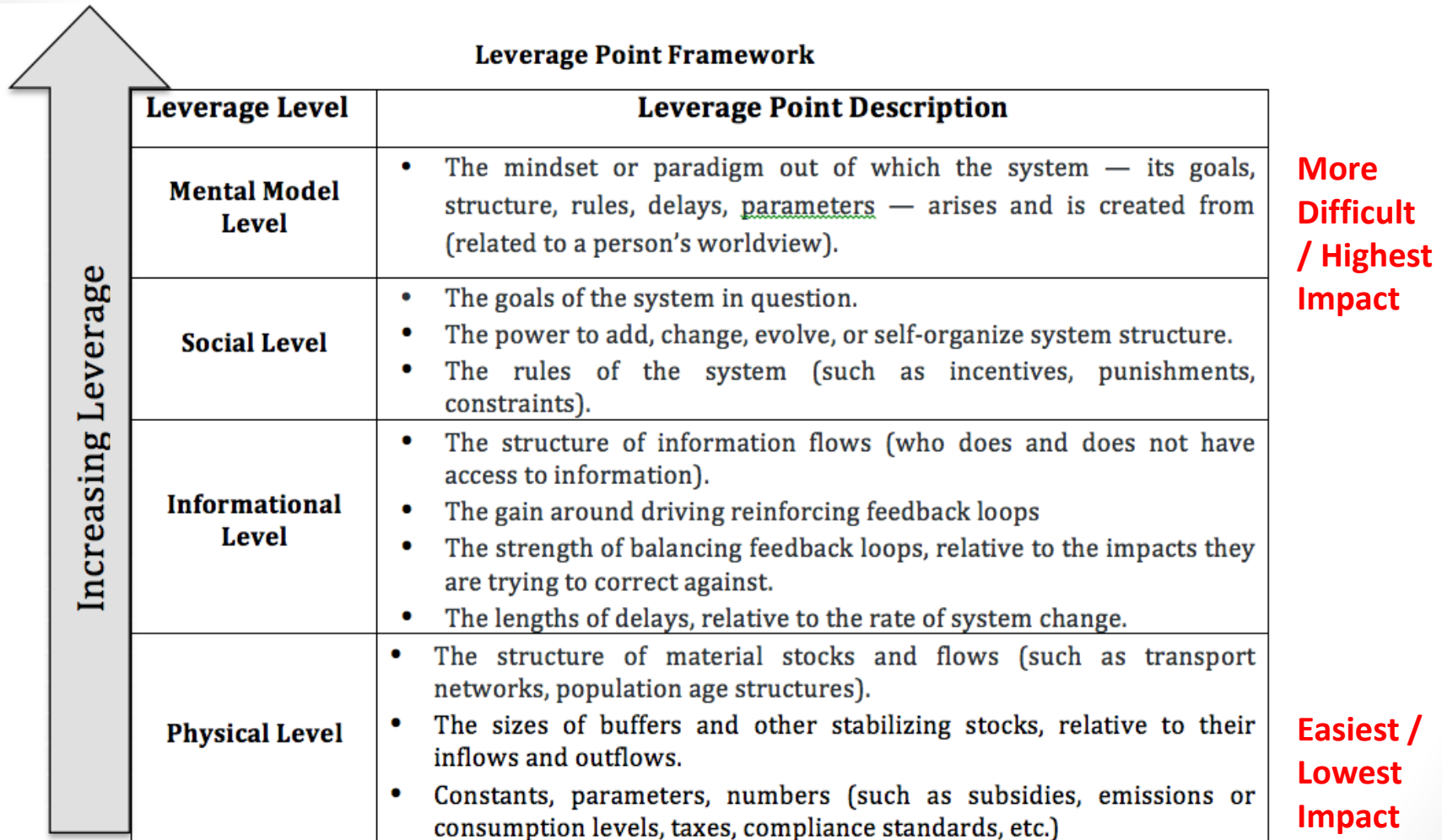
Leveraging policy entry points



High impact leverage points for policy intervention and coherence: 12 Types of Leverage Points.



Leverage Point Framework



Leverage Points – Physical Leverage

12. **Constants, parameters, numbers (such as subsidies, taxes, standards)** Example: Raising (or lowering) the minimum wage; increasing or decreasing the level of subsidy;
11. **The sizes of buffers and other stabilizing stocks, relative to their flows.** Example: Spending lots of time, money and energy on breeding program for rhinos or pandas; increasing the number of dams and water reservoirs, or the amount of water in the existing reservoirs (you can see some buffers are *very* hard to change).
10. **The structure of material stocks and flows (such as transport networks, population age structures).** Example: Building new roads or removing old ones; implementing or dropping a 1 child policy; adding high speed rail between Bangkok and the Chiang Mai (changes can be very high leverage, but are incredibly difficult to enact - the leverage is in proper initial design).

Leverage Points – Informational Leverage

9. The lengths of delays, relative to the rate of system change. Example: Time to build new housing relative to changes in demand; reducing information delays in the stock market (warning: delays are not often easily changeable, hence their low ranking)

8. The strength of balancing feedback loops, relative to the impacts they are trying to correct against. Example: reducing the risk and uncertainty for business from disruption of production from raw materials and supply chain.

7. The gain around driving reinforcing feedback loops. Example: Reducing the birth rate; lowering the influence of the wealthy on the political system (reducing the gain of reinforcing feedback loops gives the balancing loops time to work their magic).

6. The structure of information flows (who does and does not have access to information). Example: Creating a "nudge" to water and electricity usage by connecting households to information about their usage; opening access to government data to increase accountability (i.e. an outcome based results dashboard of KPIs for development planning implementation).

Leverage Points – Social Leverage

5. **The rules of the system (such as incentives, punishments, constraints).** Example: Imposing strict rules on water usage and charging premium rates for overages; requiring all stock exchange listed companies to produce vetted sustainability reports.
4. **The power to add, change, evolve, or self-organize system structure.** Example: the use of flat, non-hierarchical organisation structures, creating and supporting sharing collaborative economy. .
3. **The goals of the system.** Example: Changing the national goal and key measure of development to Gross National Happiness instead of GDP (Bhutan) ; Setting goal to be 100% zero waste company by 2020 (Interface Flor)

Leverage Point Iceberg Insights

Changes in Consciousness and Thinking - (Mental Model Level)

2. The mindset or paradigm out of which the system — its goals, structure, rules, delays, parameters — arises.
Example: Modeling a system and seeing it in a new way; shifting a country's aspiration from gross domestic product (GDP) to gross national happiness (GNH).
1. The power to transcend paradigms. Example: Mastering the art of engaging multiple perspectives and mapping systems; profoundly and madly letting go of our beliefs and notions of how the world should work; Recognise the limitations of our understanding and utilise this as a source of flexibility, humility and learning.

Worksheet 3.1 - SDG High Impact Policy Leverage Point Identification

Sustainable Development Goal (SDG):

What is your Leverage Point (LP)	Level	Name of SDG/SDV/MEA Target the LP links to	Brief explanation for why this LP was chosen
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Worksheet 3.2: SDG Leverage Point target interaction scoring

- The framework on which this work is based identifies causal and functional relations underlying progress or achievement of the sustainable development goals and targets: positive interactions are assigned scores of + 1 ('enabling'), +2 ('reinforcing') or + 3 ('indivisible'), while interactions characterised by trade-offs are scored with - 1 ('constraining'), -2 ('counteracting'), or -3 ('cancelling'); neutral interactions between SDGs are assigned 0.
- Thus, the magnitude of the score, in whichever direction, provides an indication of how influential a given SDG or target is on another.

INDIVISIBLE The strongest form of positive interaction, in which one target is inextricably linked to the achievement of another. EXAMPLE Reduction of air pollution (12.4) is indivisible from improved health and reducing non-communicable diseases (3.4)	REINFORCING One target directly creates the system conditions that lead to the achievement of another target. EXAMPLE: Integrating ecosystem and biodiversity values into national and local planning and development processes (15.9) will likely ensure that food production systems are sustainable (2.4)	ENABLING The pursuit of one objective enables the achievement of another objective. EXAMPLE: Developing infrastructure for transport (9.1) enables greater participation of women in the work force and in political life (5.5)	CONSISTENT A neutral relationship where one objective does not significantly interact with another or where interactions are deemed to be neither positive nor negative. EXAMPLE: By 2030, increase substantially the share of renewable energy in the global energy mix (7.2) is consistent with target 3.5 – strengthen the prevention and treatment of substance abuse.	CONSTRAINING A mild form of negative interaction when the pursuit of one objective sets a condition or a constraint on the achievement of another. EXAMPLE: Conserving coastal areas (14.5) and development of safe affordable housing and basic services (11.1) may constrain each other	COUNTERACTING The pursuit of one objective counteracts another objective. EXAMPLE: Doubling the agricultural productivity and incomes of small-scale food producers (2.3) can counteract the achievement of sustainable water withdrawals (6.4) and reduce degradation of natural habitats and loss of biodiversity (15.5)	CANCELLING The most negative interaction is where progress in one goal makes it impossible to reach another goal and possibly leads to a deteriorating state of the second. A choice has to be made between the two. EXAMPLE: Developing infrastructure (9.1) could be cancelling the reduction of degradation of natural habitats in terrestrial ecosystems (15.1)
+3	+2	+1	0	-1	-2	-3
Outdoor/indoor air pollution is responsible for 7 mil deaths annually, along with respiratory and cardiovascular disease but also increases in perinatal deaths. Worldwide, ambient air pollution is estimated to cause about 25% of the lung cancer deaths. Major urban centers in low and middle-income countries are the most exposed to this burden. (WHO, 2016).	If ecosystem services and biodiversity are monetized and included in the cost accounting for all national and local planning decisions, along with an inherent intrinsic value of nature in the value system of the decision makers, then it can be expected that agricultural production planning includes a more holistic and integrative approach that puts longer term health and resiliency at a higher priority.	Affordable public transport promotes social inclusion, more equal access to different parts of the city, and enabling employment for marginalized groups. In many places, women do not have access to a car and depend on public transport, walking or bicycling to get around, to work places and to social or political activities.	There is no significant interaction between the two targets.	Creating coastal zone protected areas in areas of increasing urbanization causes concern for land competition, especially in densely populated areas. Integrated coastal zone management and marine spatial planning tools are readily available to mitigate spatial competition.	Increasing productivity in agriculture is a necessary (but not sufficient) condition to improve food security. In many places, this might entail increased ground water pumping and/or better irrigation as well as increased use of agrochemical inputs, which will be detrimental to many species like bees and reptiles.	In underdeveloped regions, developing roads, dams, and power grids might be a high priority, although it will cause some unavoidable fragmentation of habitats and compromising the integrity of the natural ecosystem, leading to risks to biodiversity as well as social risks.

SDG 3 + SDG 2



TARGETS	KEY INTERACTIONS	SCORE	POLICY OPTIONS
3.1, 3.2 ← 2.3	Increasing the agricultural productivity and incomes of small-scale producers will improve access to food and economic resources, which supports the health of mothers, newborns and children	+2	Implement financial and educational policies that support smallholders to increase agricultural productivity
3.3 ← 2.3	Increased agricultural production, even at the small scale, can create new pathogen habitats, increase the risk of animal-human disease transmission, damage ecosystems, promote antimicrobial resistance in pathogens and insecticide resistance in vectors, and pollute drinking water, all of which can expose people to the risk of communicable disease	-1	Develop resource management regulation to prevent ecosystem degradation
3.9 ← 2.3	Agriculture labour may expose people to hazardous chemicals	-1	Regulate to minimise exposure to hazardous chemicals. Provide education to agricultural workers on the safe use of chemicals

SDG 3 + SDG 8



TARGETS	KEY INTERACTIONS	SCORE	POLICY OPTIONS
3.3, 3.9 ← 8.1	Economic growth can be associated with adverse effects on the environment, including water, air and soil pollution and ecosystem change, which can increase the risk of communicable disease, illness and death	-1	Put in place mechanisms in relevant industries to ensure that economic growth does not degrade the environment
3.8 ← 8.1	Increasing economic growth can enable governments to increase spending on healthcare, including towards providing universal health coverage	+1	Invest in education and training to lift productivity, create employment and strengthen the tax base, while moving to equal pay and an inclusive workforce
3.1, 3.2, 3.3, 3.4, 3.5, 3.6, 3.7, 3.8, 3.9 → 8.1, 8.5, 8.6	Increased health/well-being supports people to enter the workforce and contributes to economic growth and employment	+2	Invest in healthcare and social services
3.1, 3.2, 3.3 ← 8.5	Increasing the number of people employed supports people gaining access to the conditions for health, such as food, shelter, education and medical care	+2	Invest in the creation of decent jobs in social services that assist people into employment
3.8 ← 8.8	Safer working environments reduce exposure to hazardous chemicals	+3	Strengthen unions and regulate to protect labour rights and health and safety in the workplace

Session 3.2 Worksheet: SDG Leverage Point target interaction scoring

Instructions:

1. Select one of your SDG Policy Leverage Point targets.
2. Then think about, discuss and identify another SDG and target which you agree is strongly linked to your leverage point target in a causal (cause and effect) way.
3. Refer to the Interaction Scoring Table provide to discuss and decide on what is the type of interaction that exist between the two SDG targets, particularly if a policy intervention is made at the selected Leverage Point.
4. Use the table to record your answer, scoring rationale, and explanation.
5. If time allows, go to another SDG Leverage Point target.

Worksheet 3.2 SDG Interaction Scoring Worksheet

Primary SDG Leverage Point Target	Other SDG Target	Type of Interaction and Score (+3 to -3)	Explanation

Session 3.2 Group Discussions

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