



American
University
of Armenia



institute of
environmental
engineering



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Yerevan Series on Engineering and Sustainability*

SUSTAINABLE DEVELOPMENT: THEORY AND IMPLEMENTATION METHODS

14-17 November, 2017

Venue: Akian Gallery, American University of Armenia, 40 Marshal Baghramyan Ave, Yerevan 0019

(*) The Yerevan Series on Engineering and Sustainability has a number of talks and workshops planned for 2017 and 2018. The Series is offered within the frames of the Erasmus+ MARUEEB Project. The academic partners from Armenia are AUA and NPUA. Visit <http://ace.aua.am/projects/marueeb/> and <http://marueeb.ru/>

Workshop 1 (Tuesday, November 14)

Exploring what is 'sustainable' / considering how 'sustainable' is used

How do you understand these words and how do you use them?

Activity

1. Prepare individual concept map¹ which articulates/depicts your understanding of each of the following (30 minutes):

- *Sustainable*
- *Sustainably*
- *Sustainability*
- *Sustainable development*

The concept map must indicate:

What it is (what the word refers to)

- *Structure*: a thing which we speak of....

How you do it (this may seem strange, but how do you 'do' sustainable)

- *Process*: activities and sequences of activity, the ongoing flow...

Why do it, why engage with it

- *The cause-effect relation* which is our purpose. We do 'A' to achieve 'B'...

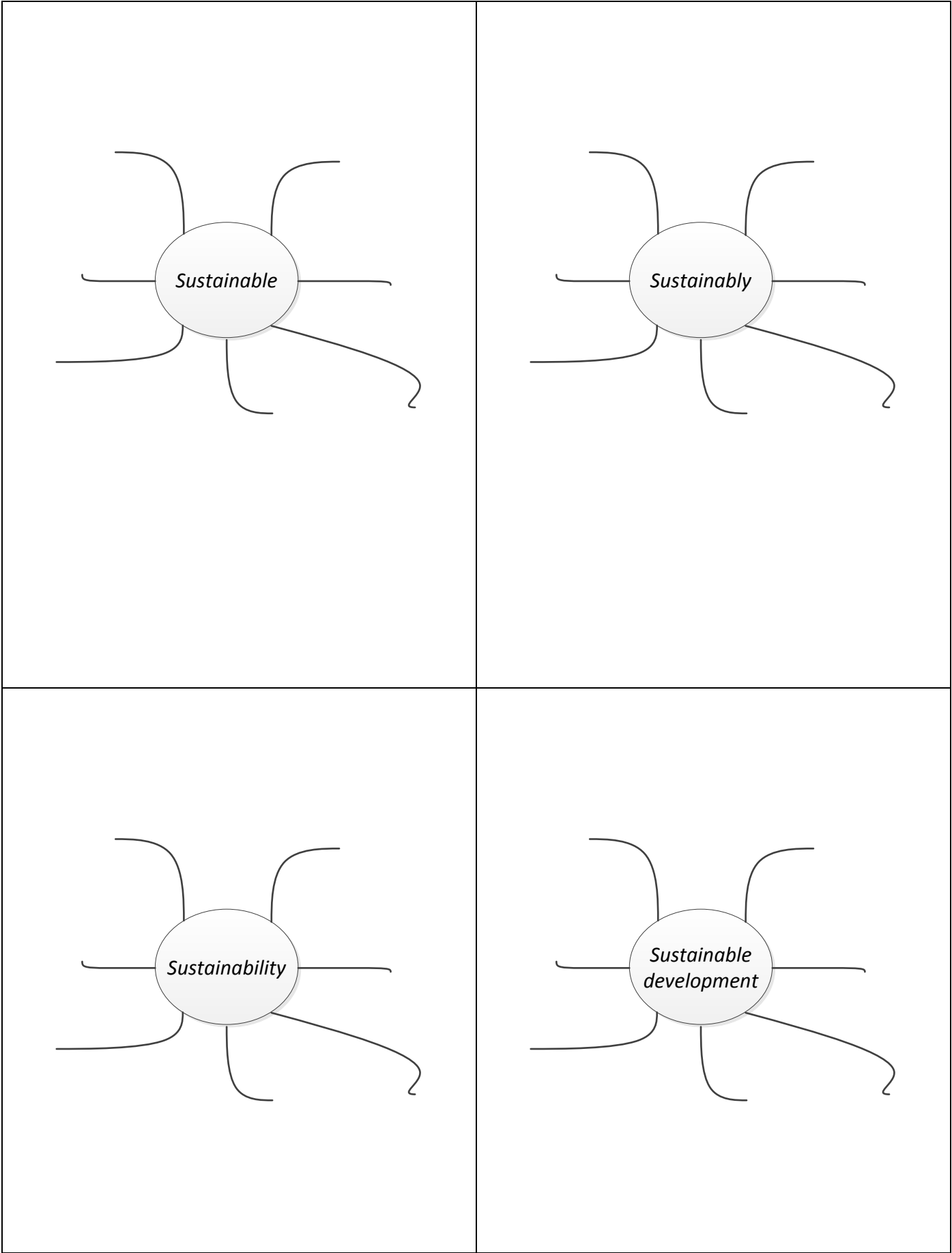
2. Share your concept map with each group participant and collect a shared (consensus) meaning on a new page / prepare group concept map (30 minutes).

¹ Concept maps are graphical tools for organizing and representing knowledge.

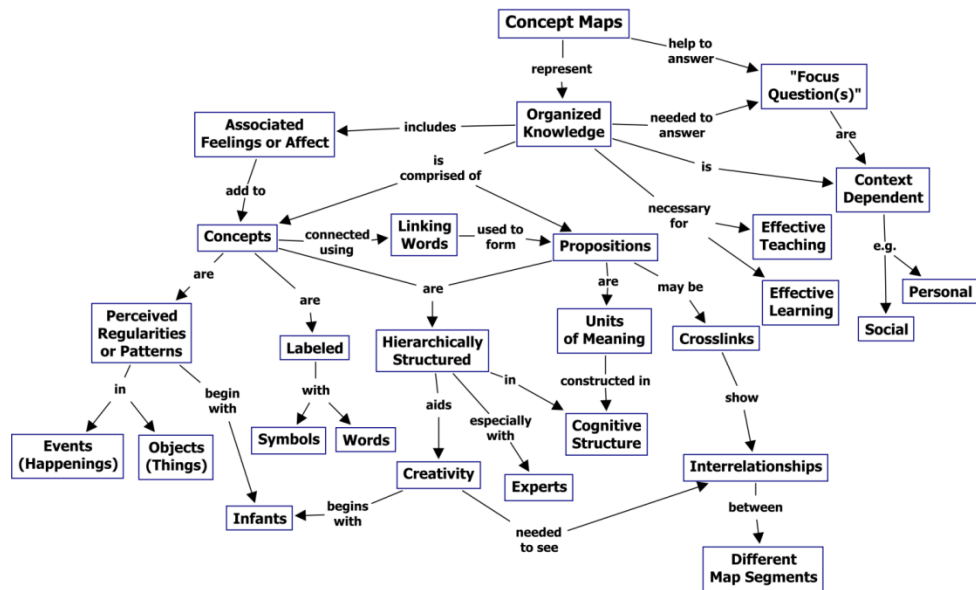
They include concepts, usually enclosed in circles or boxes of some type, and relationships between concepts indicated by a connecting line linking two concepts.

Concept mapping is a technique that allows you to understand the relationships between ideas by creating a visual map of the connections.

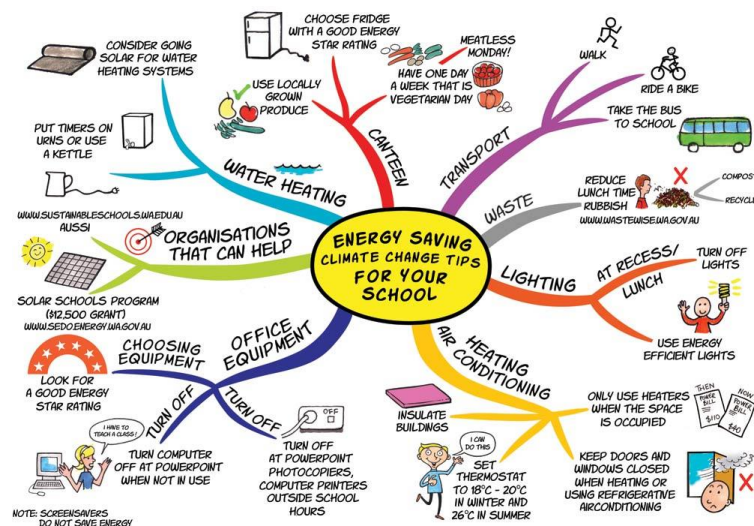
3. 30 minutes in total for presentations and discussions.



Examples



<http://cmap.ihmc.us/docs/theory-of-concept-maps>



Linkage between Sustainable development goals (SDGs)



Countries around the world are faced with a significant challenge: How can they reach the 17 SDGs – and 169 targets that sit underneath these goals – by 2030? The SDGs, which were adopted by the international community in 2015, cover a diverse range of issues including gender equity, sustainable cities, access to clean water, and good governance. It is a big, unwieldy, ambitious agenda that – if it is successfully implemented – could set the world on a course toward inclusive, sustainable development.

Activity

1. Identify the only one goal most important for Armenia from SDGs (5-10 minutes).
2. Map the linkages between chosen goal and other Sustainable Development Goals. Identify positive and negative interactions (50 minutes).
3. 30 minutes in total for presentations and discussions.

Important links of goal _____ with the rest of the SDGs

SDG	<i>Link (positive link/ potential synergy OR negative link/ potential trade-off)</i>	<i>Description of link</i>
SDG 1 Poverty		
SDG 2 Food security		
SDG 3 Health and well-being		
SDG 4 Education		
SDG 5 Gender equality		
SDG 6 Water		
SDG 7 Energy		
SDG 8 Economic growth and employment		
SDG 9 Industrialization and infrastructure		

SDG 10 Inequality		
SDG 11 Cities		
SDG 12 Sustainable consumption and production		
SDG 13 Climate change		
SDG 14 Oceans		
SDG 15 Terrestrial ecosystems		
SDG 16 Peaceful and inclusive societies		
SDG 17 Global partnership for sustainable development		

Sustainable development implementation methods



Activity

1. Identify the business sectors / organizations in Armenia that already uses and that could use the sustainable development implementation methods (30 minutes).
2. Identify the contradictions and tensions of organizations in using these methods. Fill the table (30 minutes).

3. 30 minutes in total for presentations and discussions.

Sustainable economic development methods of implementation	Business sectors / organizations that already uses these methods	Business sectors / organizations that could use these methods	The contradictions and tensions of organizations in using these methods
Circular Economy			
Environmental Management Systems			
Eco-design			
Life cycle assessment			
Sustainable consumption			

Workshop 4 (Friday, November 17)

The GAPFRAME – Translating the SDG's into Relevant National Challenges for Strategic Opportunities

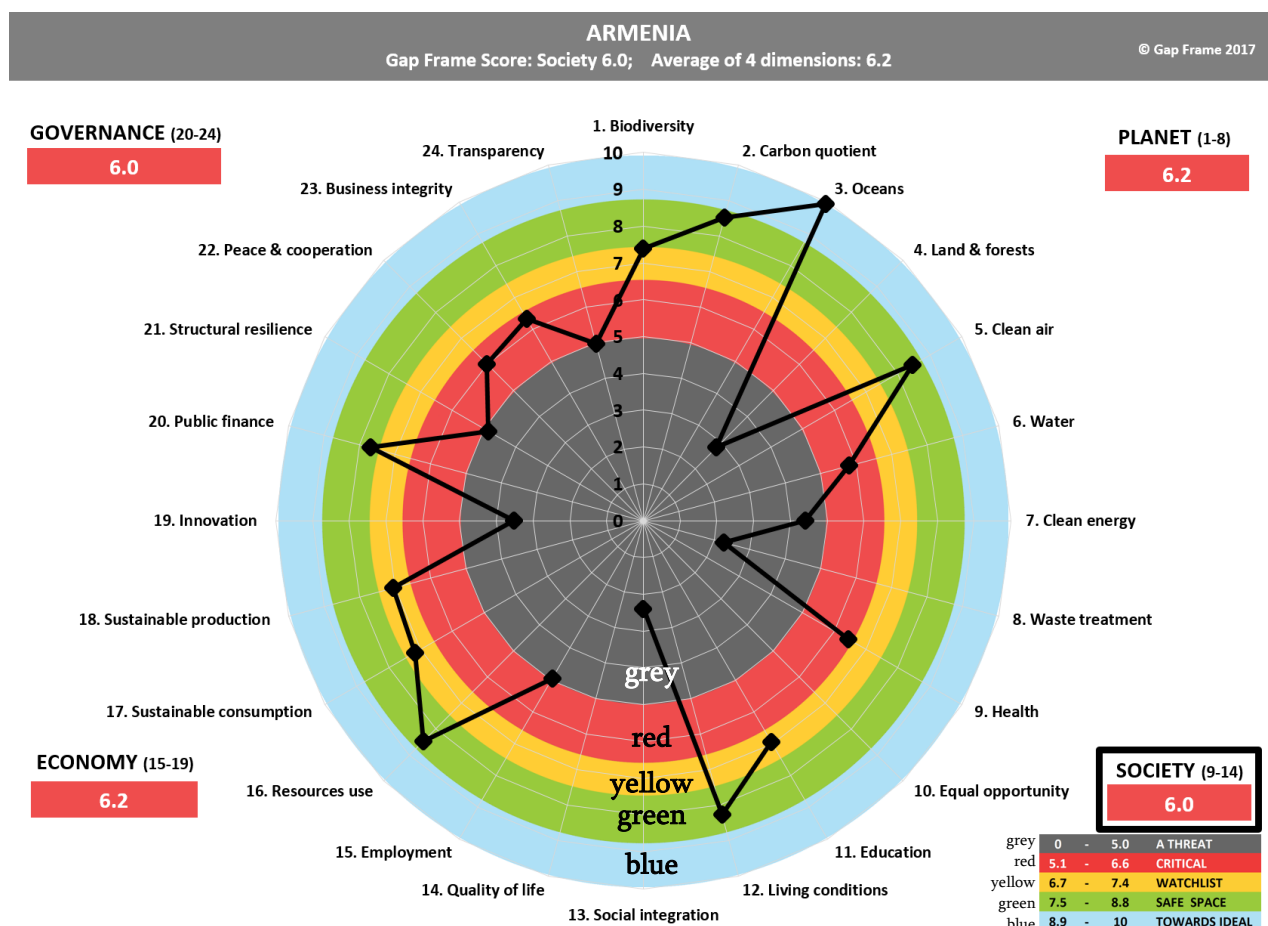


The Gap Frame is a normative framework that translates the Sustainable Development Goals (SDGs) into nationally relevant issues and indicators for business.

The Gap Frame is a normative framework that translates the SDGs into relevant measures for each nation and as a basis for a strategic business tool, highlighting the gap of where we are today versus where we need to be so that all of us can live well on one planet.

Activity

1. Compare the Gap Frame results of Armenia and World. Do you agree with the results? Discuss in groups (30 minutes).
2. What Sustainable Development Goals are relevant to Armenia according to the Gap Frame results? What sustainable development methods in what economic sectors could be used for more sustainable future in Armenia? (30 minutes).
3. 30 minutes in total for presentations and discussions.



WORLD

Gap Frame Score: Governance 5.1; Average of 4 dimensions: 5.6

© Gap Frame 2017

GOVERNANCE (20-24)

5.1

PLANET (1-8)

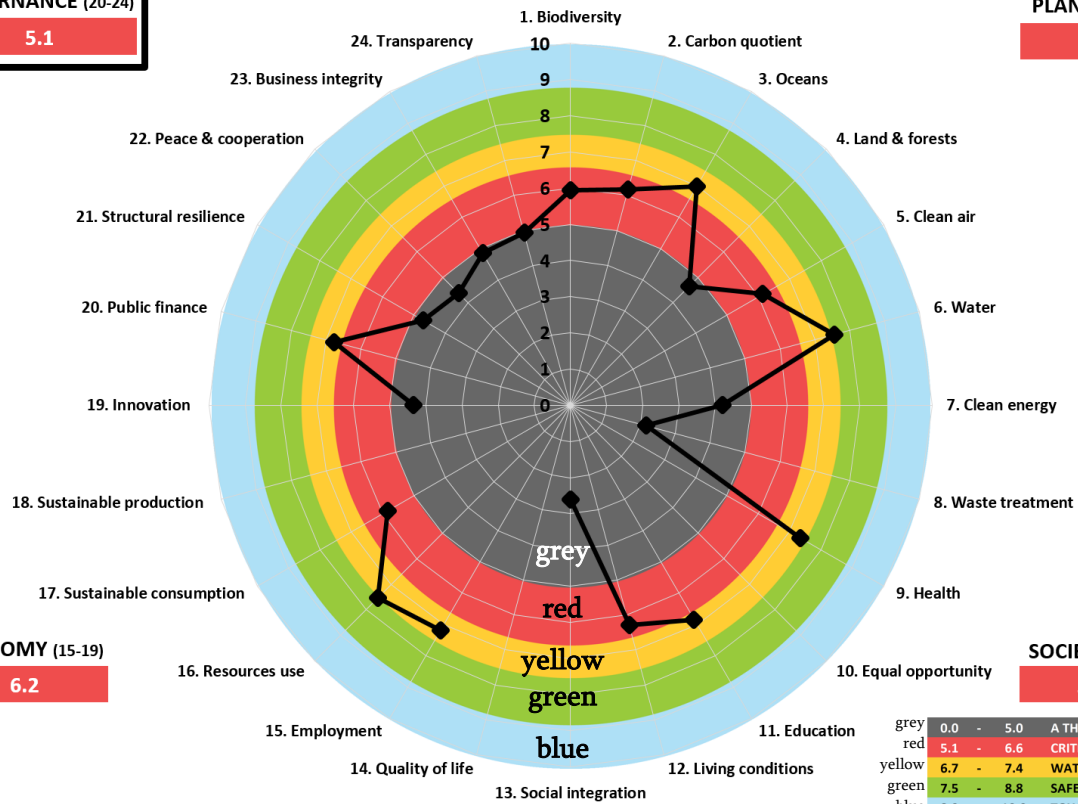
5.5

ECONOMY (15-19)

6.2

SOCIETY (9-14)

5.8



grey	0.0	-	5.0	A THREAT
red	5.1	-	6.6	CRITICAL
yellow	6.7	-	7.4	WATCHLIST
green	7.5	-	8.8	SAFE SPACE
blue	8.9	-	10.0	TOWARDS IDEAL

Discussion remarks

A SAFE SPACE FOR ALL OF US GAPFRAME: GLOBAL GOALS RELEVANT FOR EVERY NATION & BUSINESS

TRANSLATING 17 GLOBAL SUSTAINABLE DEVELOPMENT GOALS (SDGs)

INTO 24 ISSUES RELEVANT TO ALL NATIONS & BUSINESS

