

TELOS TOPIC 01

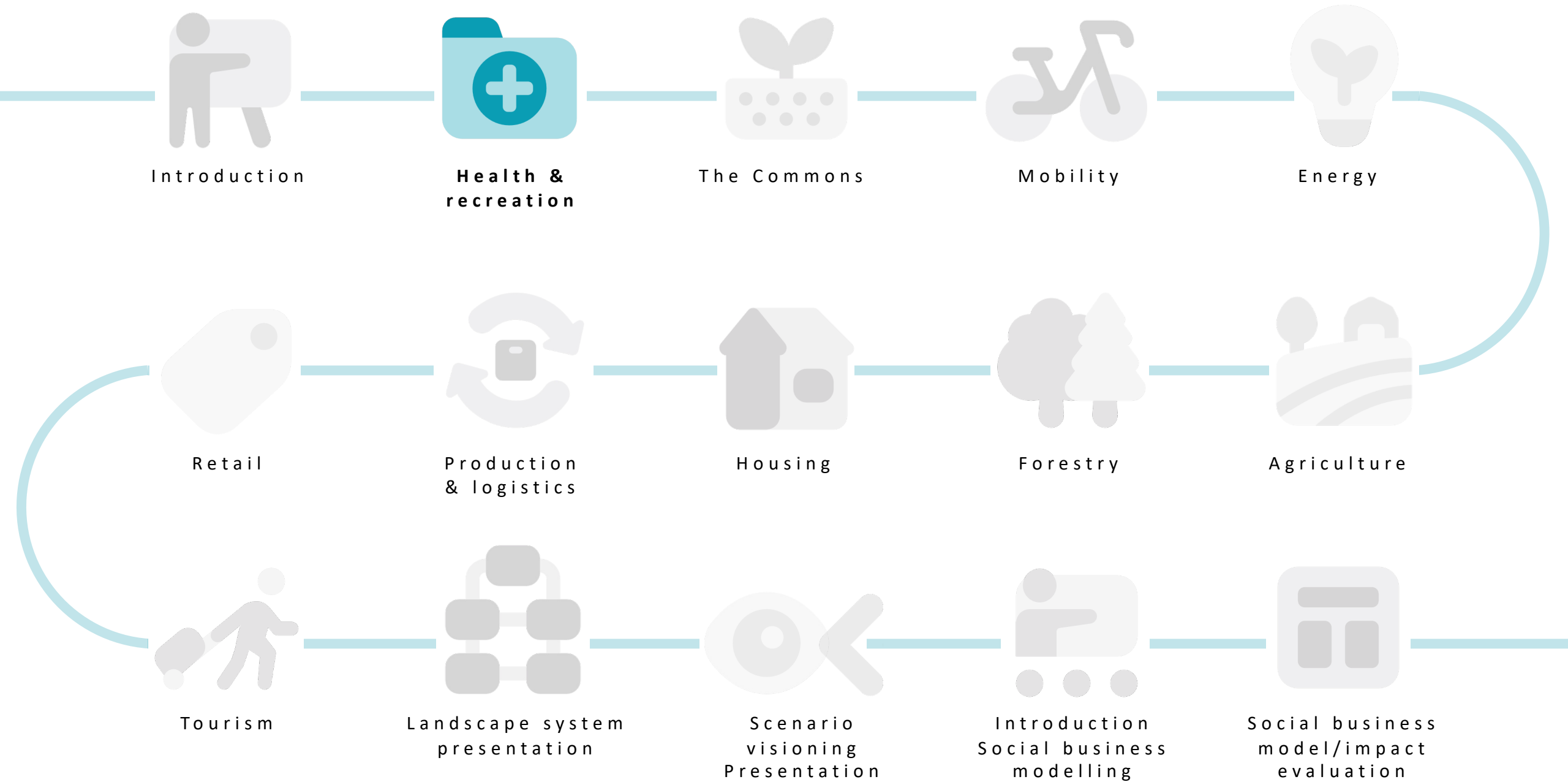
Health & Recreation

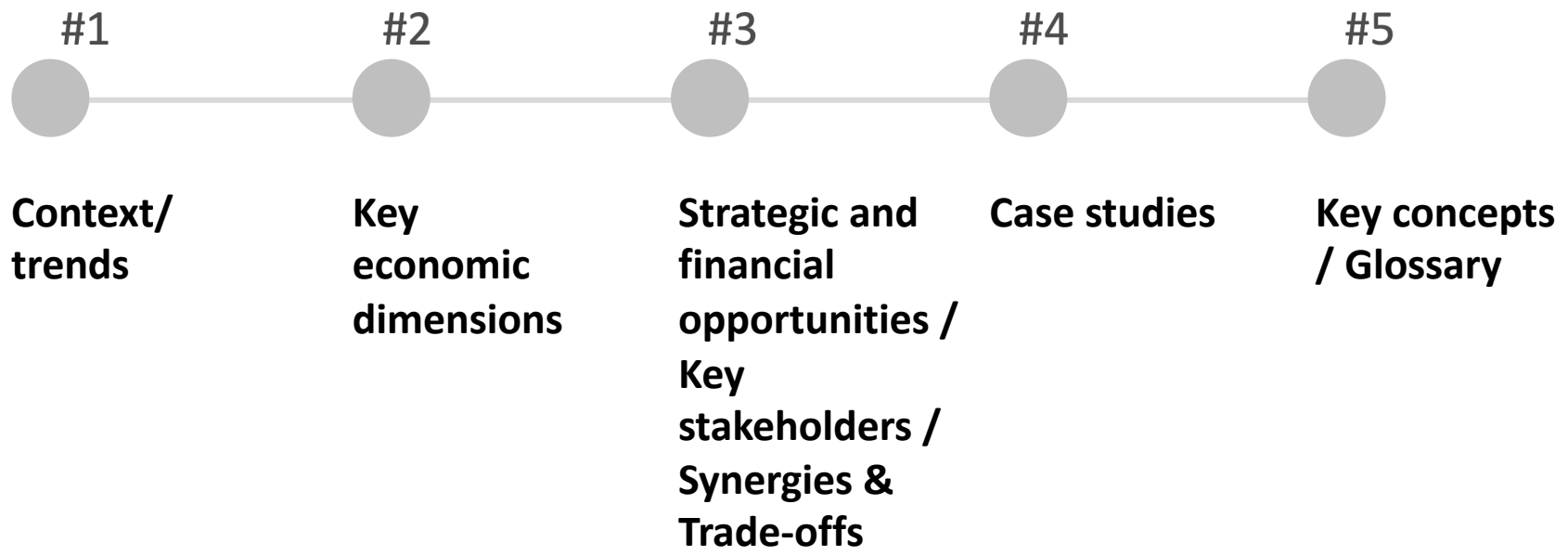
Content development led by
Prof. Dr. Maria Beatrice Andreucci
Sapienza University



SAPIENZA
UNIVERSITÀ DI ROMA







#1

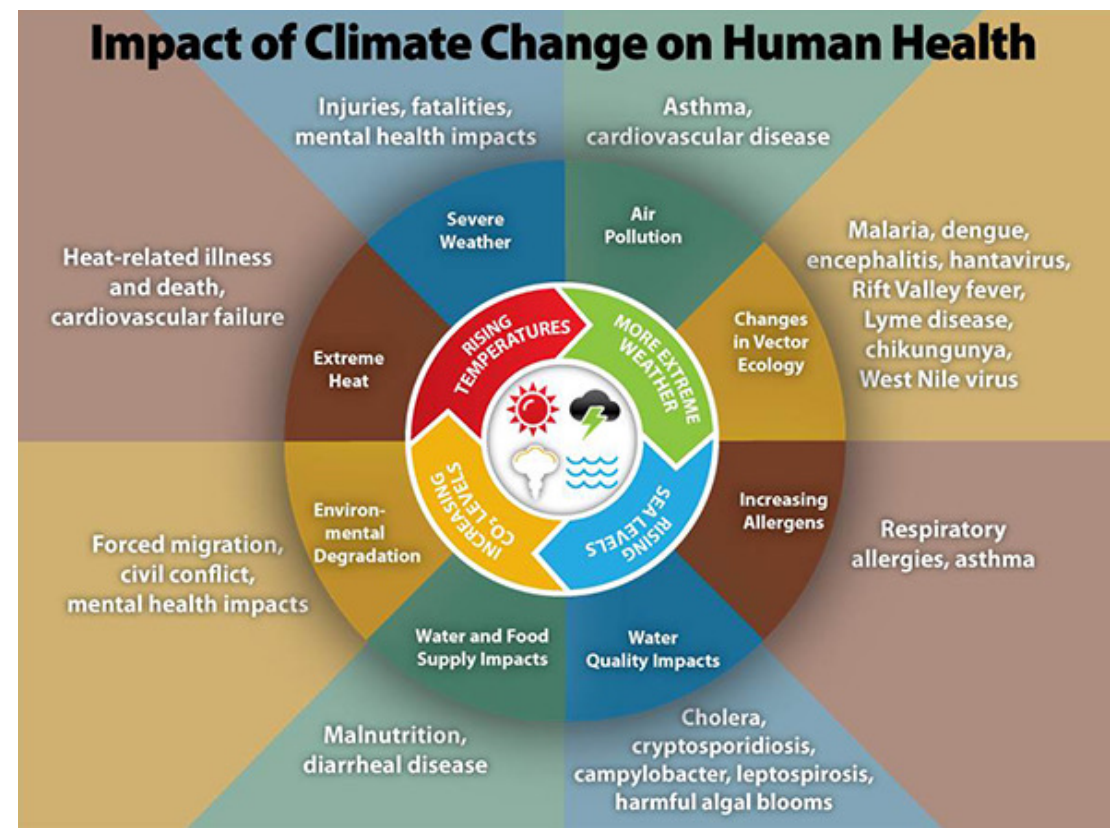


**Context /
trends**



Climate change and health

C
o
n
t
e
x
t
/
r
e
n
d
s



CDC

No health without mental health

According to the World Health Organization's definition, "health is a state of complete physical, mental and social well-being and not only the absence of disease or infirmity."



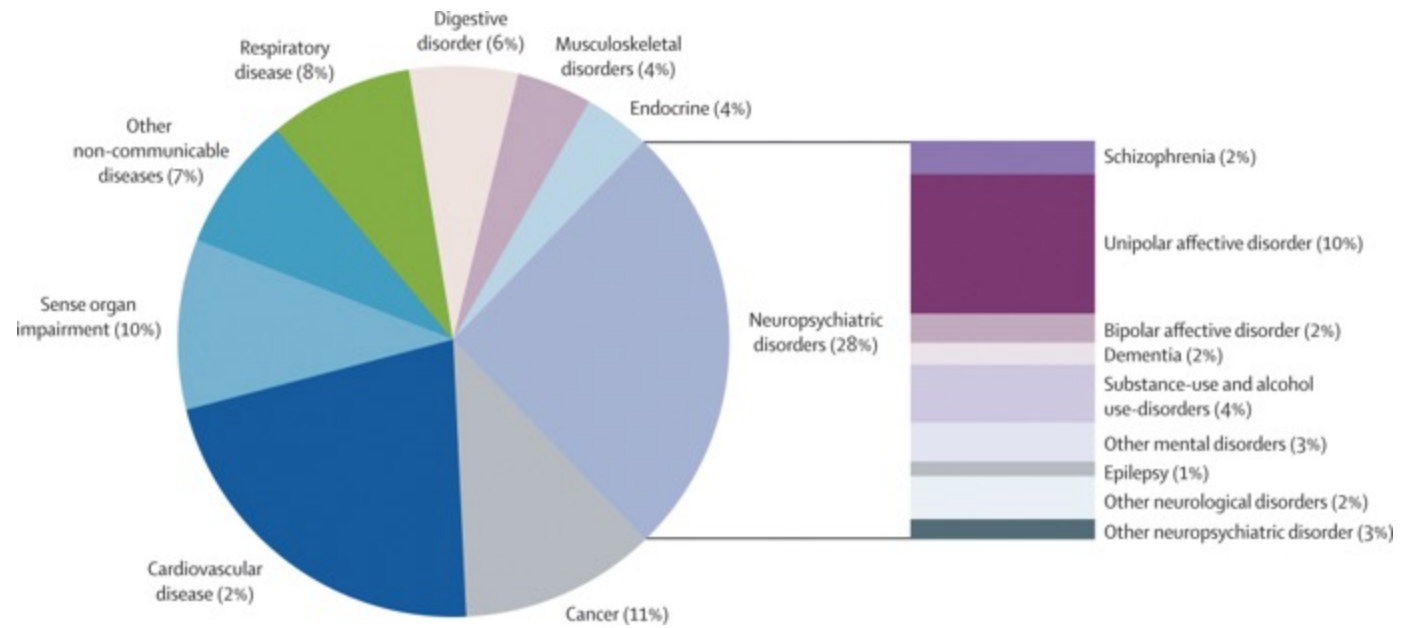
Social injustice and Nature gap

C
o
n
t
e
x
t
/
r
e
n
d
s



CAP

Non-Communicable Diseases



The Lancet 2017

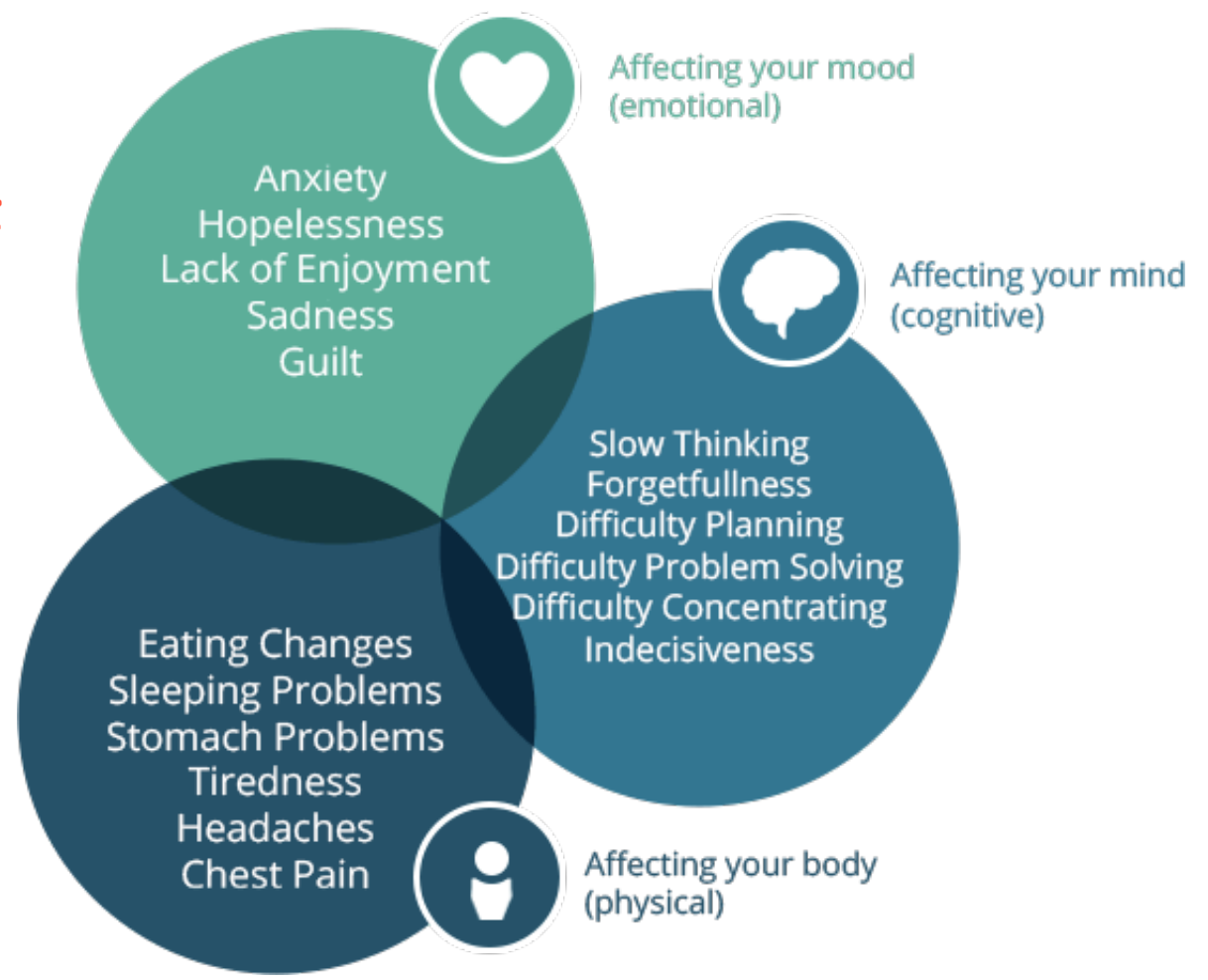
C
o
n
t
e
x
t
/
r
e
n
d
s

C
o
n
t
e
x
t
/
r
e
n
d
s

CMD LEADING CAUSES OF MORBIDITY AND DISABILITY

At a global level, over **300 million people** are estimated to suffer from depression, equivalent to **4.4% of the world's population**

(WHO, 2017)



#2

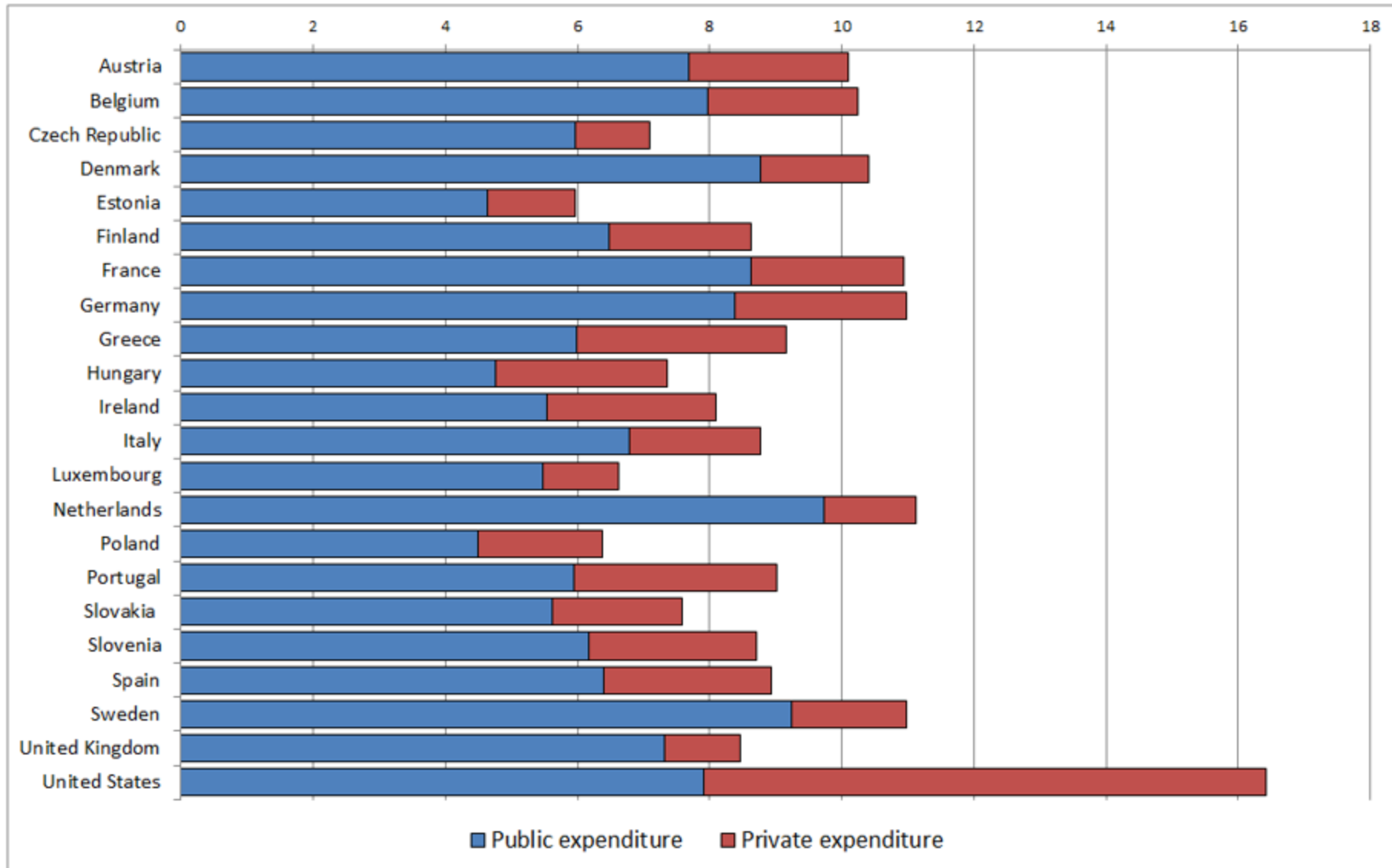


Key economic dimensions



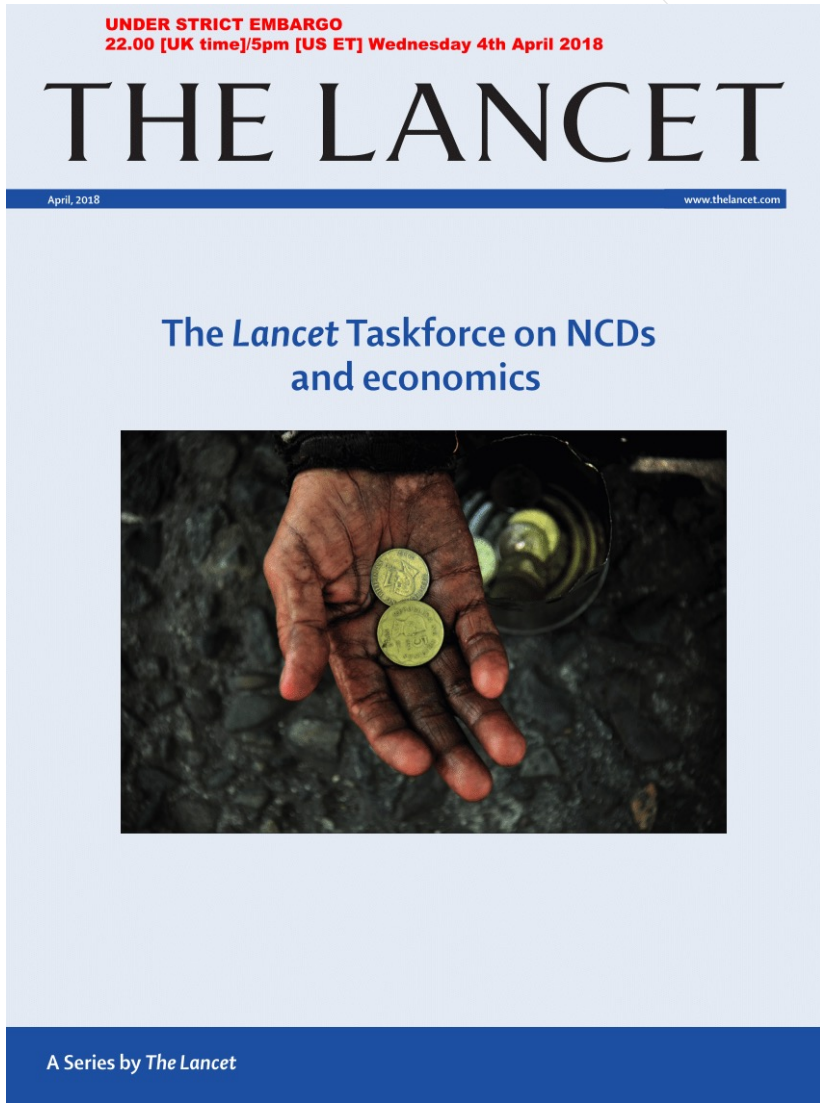
Increasing demand for health services

K
e
y
e
c
o
n
o
m
i
c



K
e
y
e
c
o
n
o
m
i
c

Financial costs of NCDs



NCDs as a major challenge for sustainable development

K
e
y
e
n
c
o
n
o
m
i
c



NCDs ACROSS THE SDGs
A CALL FOR AN INTEGRATED APPROACH



#3

**Strategic and financial
opportunities /
Key stakeholders /
Synergies & Trade-offs**

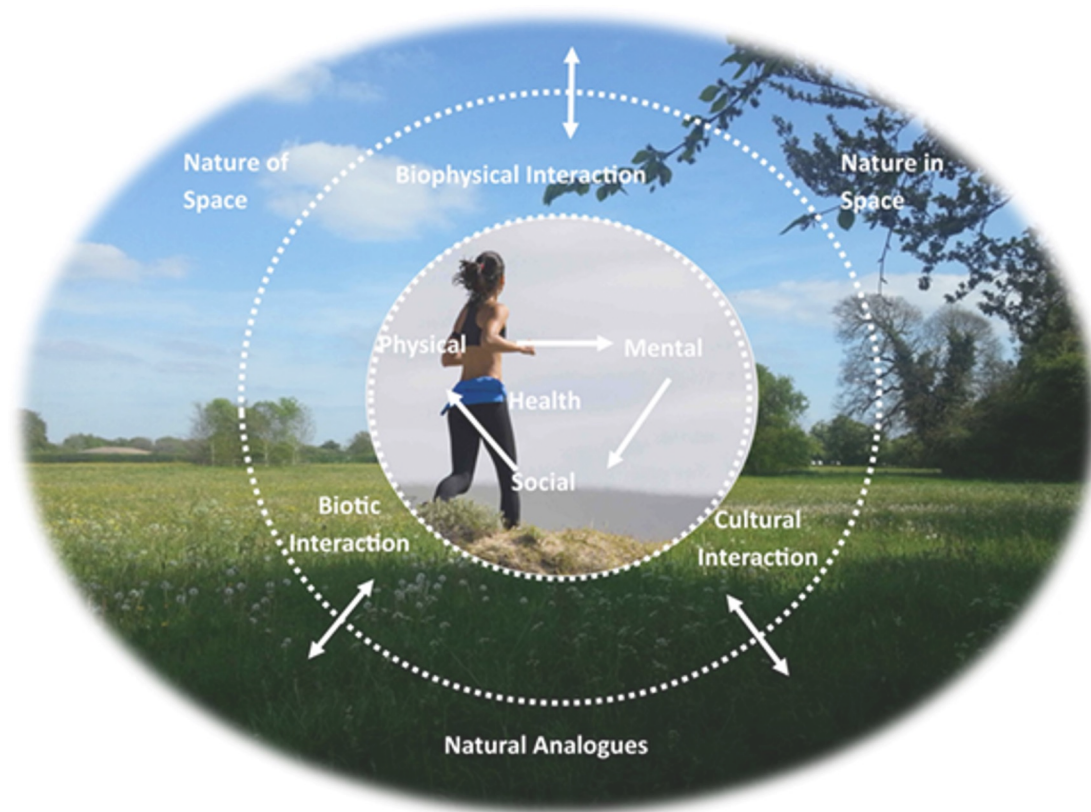
Importance of space and proximity to Nature



Greenwich

S
t
o
p
p
a
t
o
r
t
.
&
u
n
f
i
t
n
i
a
e
n
s
.

Building evidence of benefits of nature

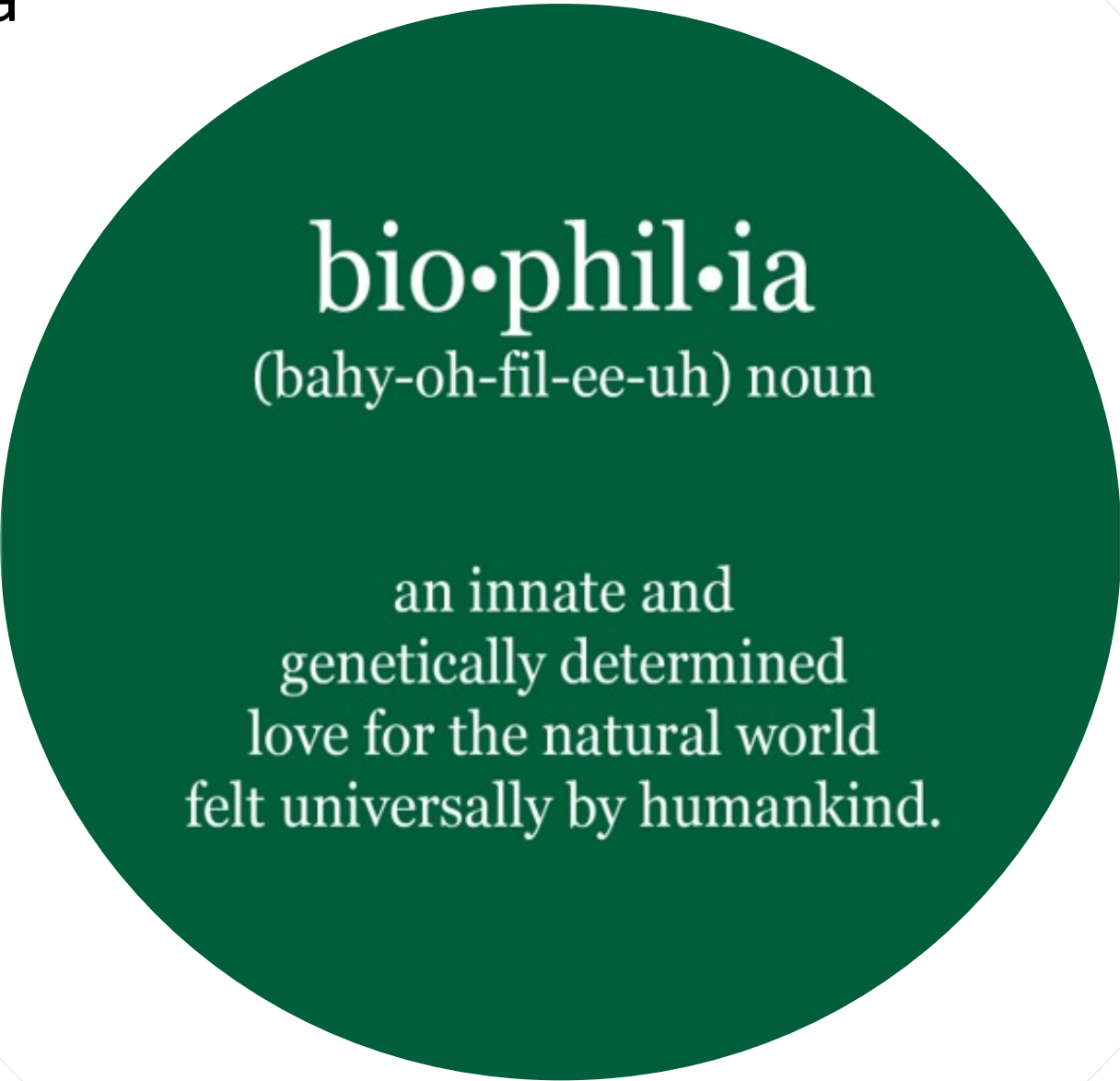


Frontiers

S
t
o
r
p
a
p
t
o
r
t
.
&
u
n
f
i
t
n
i
a
e
n
s
.

Biophilia

S
t
o
r
p
a
p
t
o
r
t
.
&
u
n
f
i
t
n
i
a
e
n
s
.



bio·phil·ia
(bahy-oh-fil-ee-uh) noun

an innate and
genetically determined
love for the natural world
felt universally by humankind.

The Biophilia Hypothesis



EDITED BY **Stephen R. Kellert**
AND **Edward O. Wilson**

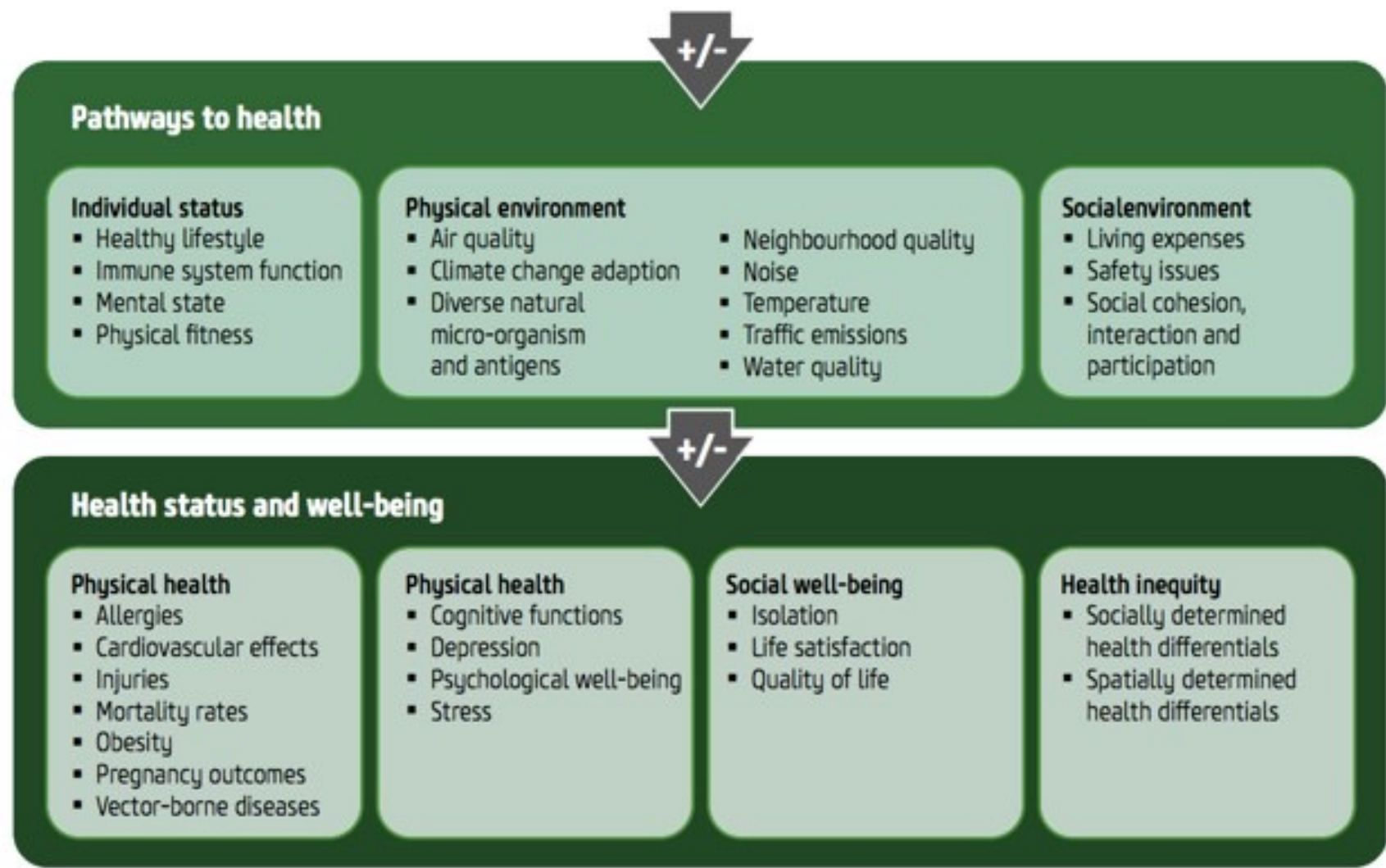


K
e
y
s
t
a
k
e
h
o
l
d
e
r
s

The role of biophilic designers



The pathways



K
e
y

s
t
a
k
e
h
o
l
d
e
r
s

Stress reduction

S
T
y
n
e
r
g
i
e
s
&
T
r
a
d
e
-
o
f
f
s



Physical activity



S
T
y
n
e
r
g
-
i
o
f
s
&

Social Cohesion



S
T
y
n
e
r
g
-
i
o
f
s
f
s
&

Air quality



S
T
y
n
e
r
g
i
o
f
s
&

Difficulties with biophilic design

S
T
Y
R
N
A
E
R
G
-
I
O
E
F
S
S
&



Who benefits from Nature?

S
T
Y
n
e
r
g
-
i
e
s
f
s
&



Stefano Boeri Architects



IT'S GETTING HOT

IT'S THE HUMANS!



CLIMATE CHANGE HAS A SIGNIFICANT IMPACT ON HEALTH

1 TELL PEOPLE THE TRUTH ABOUT THE DANGERS WE FACE

2 TELL PEOPLE WHAT THEY CAN DO ABOUT IT... CHANNEL THE ENERGY OF ANXIETY INTO ACTION

HUMANITY IS DIRECTLY CHANGING THE CLIMATE

HEAT, DROUGHT, FLOODS AND HURRICANES IT ALL IMPACTS PUBLIC HEALTH

Pollution... Bad for Health... bad for the CLIMATE... THE RECENT CLIMATE CONFERENCE DID NOT CONSIDER PUBLIC HEALTH ENOUGH



NUTRIENT RICH FOOD UNDER PRESSURE FROM CLIMATE CHANGE... THERE WILL NOT BE ENOUGH CALORIES TO FEED THE WORLD...

SOLUTIONS: THERE ARE SHORT, MEDIUM AND LONG TERM ACTIONS... BUT WE NEED TO DO IT!

FOOD HAS A DIRECT IMPACT ON HEALTH

WE NEED TO SHOW THE BENEFITS OF

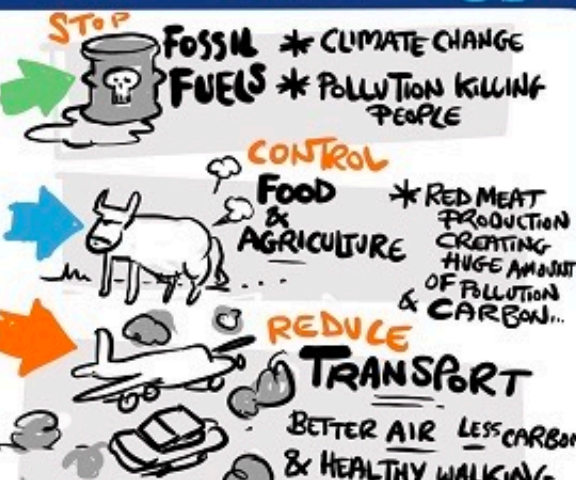
NET ZERO



PEOPLE EXPECT THE GOVERNMENT TO ACT & SAVE US...

THE HERD MENTALITY

BOTH INDIVIDUALS AND ORGANISATIONS NEED TO ACT...



IT'S NOT JUST PHYSICAL HEALTH IT'S ABOUT MENTAL HEALTH

PRE-TRAUMATIC STRESS... A REACTION TO REALITY

IT'S A REACTION TO REALITY

WE ARE DOMINATED BY OUR EMOTIONS... AND ANXIETY & STRESS ARE AT THE FOREFRONT...

RAARGH! WE START TO REGRESS AND DO NOT MAKE GOOD DECISIONS AS A RESULT!!

IN SOCIETY WOMEN ARE AT THE TABLE TO ACT ON CLIMATE CHANGE... CHEAP

IN FOOD MORE PEOPLE THINK ABOUT COST THAN CLIMATE... EXPENSIVE

IT'S A SYSTEM SOLUTION... LIVEILLUSTRATION.CO.UK

#4

Case studies



Oslo

C
a
s
e

s
t
u
d
i
e
s



The Harbour Promenade

C
a
s
e
s
t
u
d
i
e
s



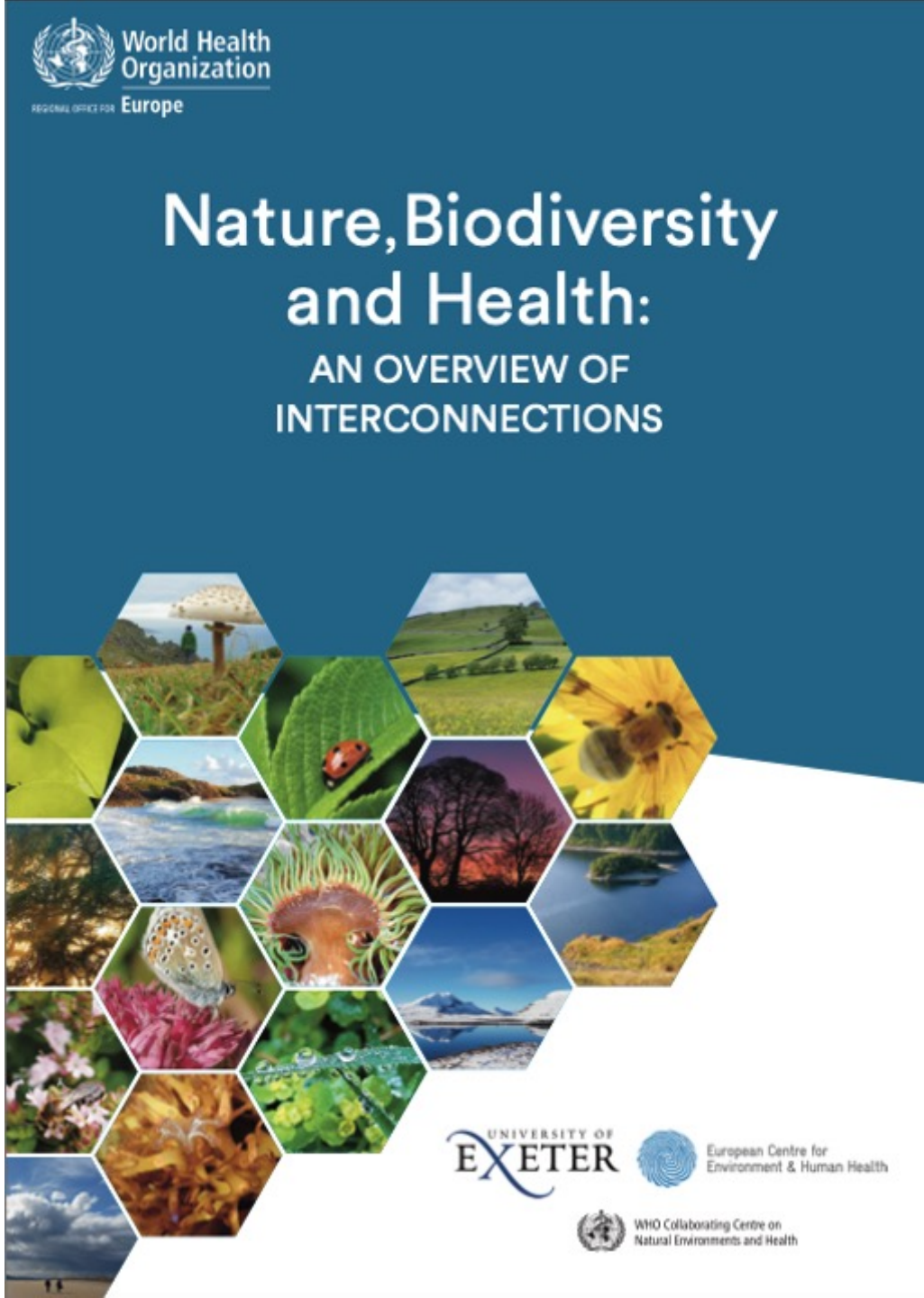
Losæter “Garden of Senses”

C
a
s
e
s
t
u
d
i
e
s



CC

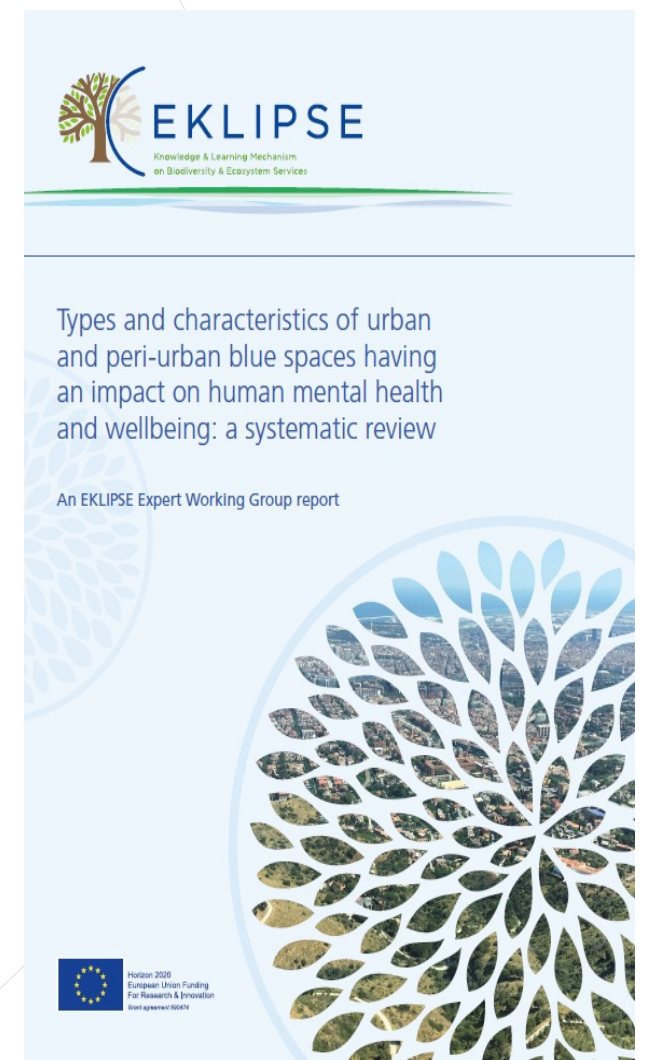
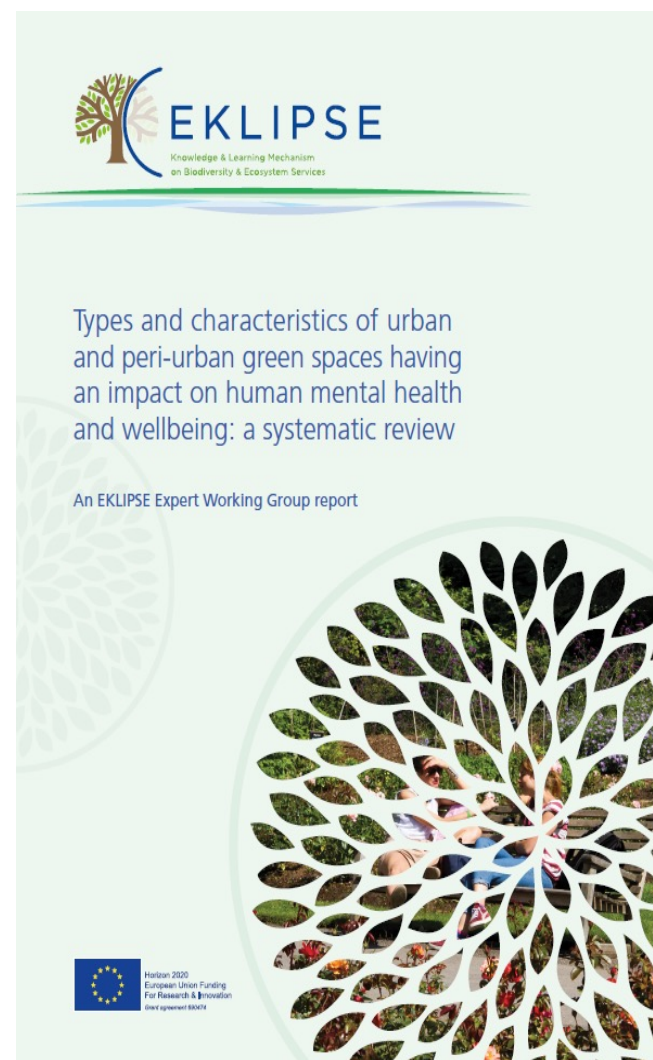
World Health Organization - European Centre for Environment and Health



EKLIPSE Expert Working Group and the policy request

Maria Beatrice Andreucci¹, Barbara Livoreil², Agnieszka O. Guizzo³, Sjerp de Vries⁴, Annamaria Lammel⁵, Alessio Russo⁶, Liz O'brien⁷, Zoe Davies⁸, Julie Glanville⁹, Hans Keune¹⁰, Melissa R. Marselle¹¹, Roy Remmen¹⁰, Hanna Wood⁹.

¹Sapienza University of Rome; ²Fondation pour la Recherche sur la Biodiversité; ³National University of Singapore; ⁴Wageningen University & Research; ⁵Université Paris 8; ⁶Far Eastern Federal University; ⁷Forest Research; ⁸Durrell Institute of Conservation and Ecology; ⁹University of York; ¹⁰University of Antwerp; ¹¹German Centre for Integrative Biodiversity Research.



C
a
s
e

s
t
u
d
i
e
s

C
a
s
e

s
t
u
d
i
e
s

Key findings: The relevance of biodiversity

Urban green space, parks, forests, grassland, trees and other plants, the coast **all showed positive relations** with mental health.

Comparisons for green space showed highly mixed results, indicating that there is **not one “superior” type** of green space. **All green space matters.**

Dense vegetation may have a **negative** association with mental health.

More research is needed making direct **comparisons** between different green / blue space types and characteristics.

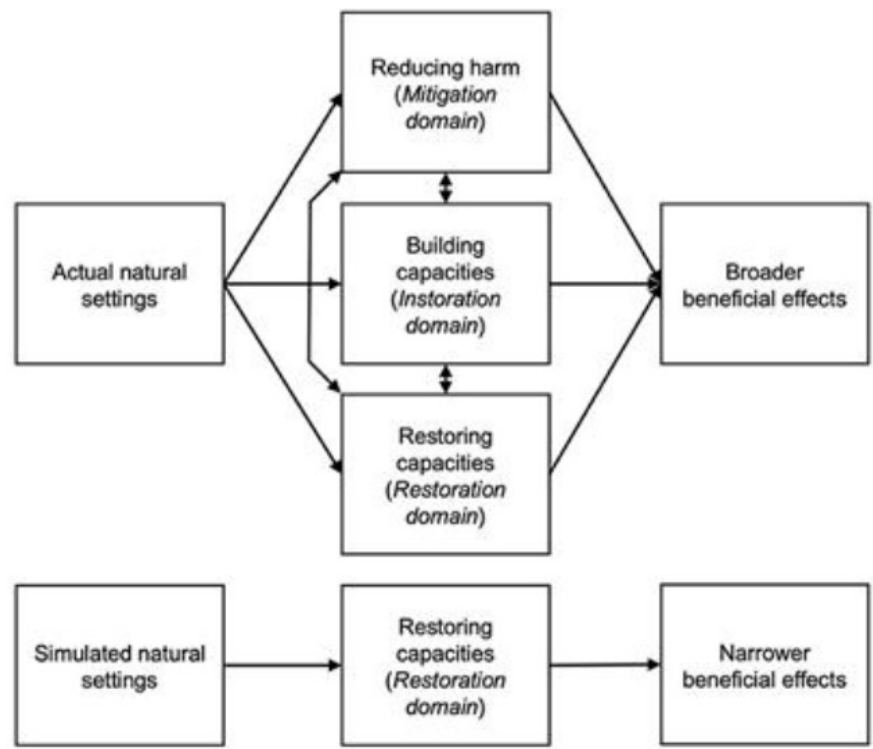
The **limited evidence** base for **inland waters** did not show pronounced effects on mental health.

More research is needed looking at actual **exposure** and taking **experiences** into account.

Key findings: Explaining the health benefits of natural settings

C
a
s
e

s
t
u
d
i
e
s



Markevych et al.

Key findings: Multiple benefits

NATURE AND MENTAL HEALTH: THE BENEFITS

- Reduce stress levels**
Enjoy the calm of nature, helping to lower your blood pressure and reduce production of stress hormones.
- Open up creatively**
Nature is an endless resource of inspiration. Head outside for a world of opportunities to be creative.
- Be more present**
Use the outdoors to practice mindfulness, helping you be more relaxed and less anxious.
- Improve your mood**
Establish a connection with nature to help build positive long-term outcomes for your wellbeing.
- Better your physical health**
Walking, running, cycling - it all helps release positive hormones that improve our physical and mental health.

C
a
s
e

S
t
u
d
i
e
s

Key findings: Mostly relevant for urbanites

C
a
s
e
s
t
u
d
i
e
s



Key findings: **Green vs Blue spaces**

C
a
s
e

s
t
u
d
i
e
s



Andreucci

WHO European Programme of Work 2020 – 2025 – “United Action for Better Health in Europe”

C
a
s
e

s
t
u
d
i
e
s



MENTAL HEALTH COALITION



DIGITAL HEALTH EMPOWERMENT



IMMUNIZATION AGENDA



BEHAVIOURAL AND CULTURAL INSIGHTS

Green and Blue Spaces and Mental Health

New Evidence
and Perspectives for Action



Booklet and reports (and other relevant publications) can be found at:

<https://www.researchgate.net/profile/Maria-Andreucci>

#5



Key concepts / Glossary



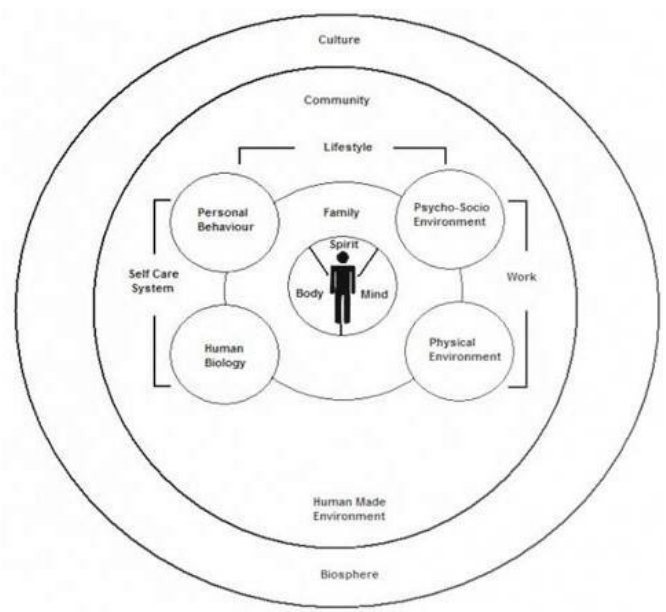
K
e
y
G
c
o
n
c
e
p
t
s
/
o
o
s
a
r
y

Health



Definition of Health

Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity.



Mental health

**Definiton of Mental Health according to the
World Health Organisation**



K
e
y
G
c
o
n
c
e
p
t
s
/
l
o
o
s
s
a
r
y

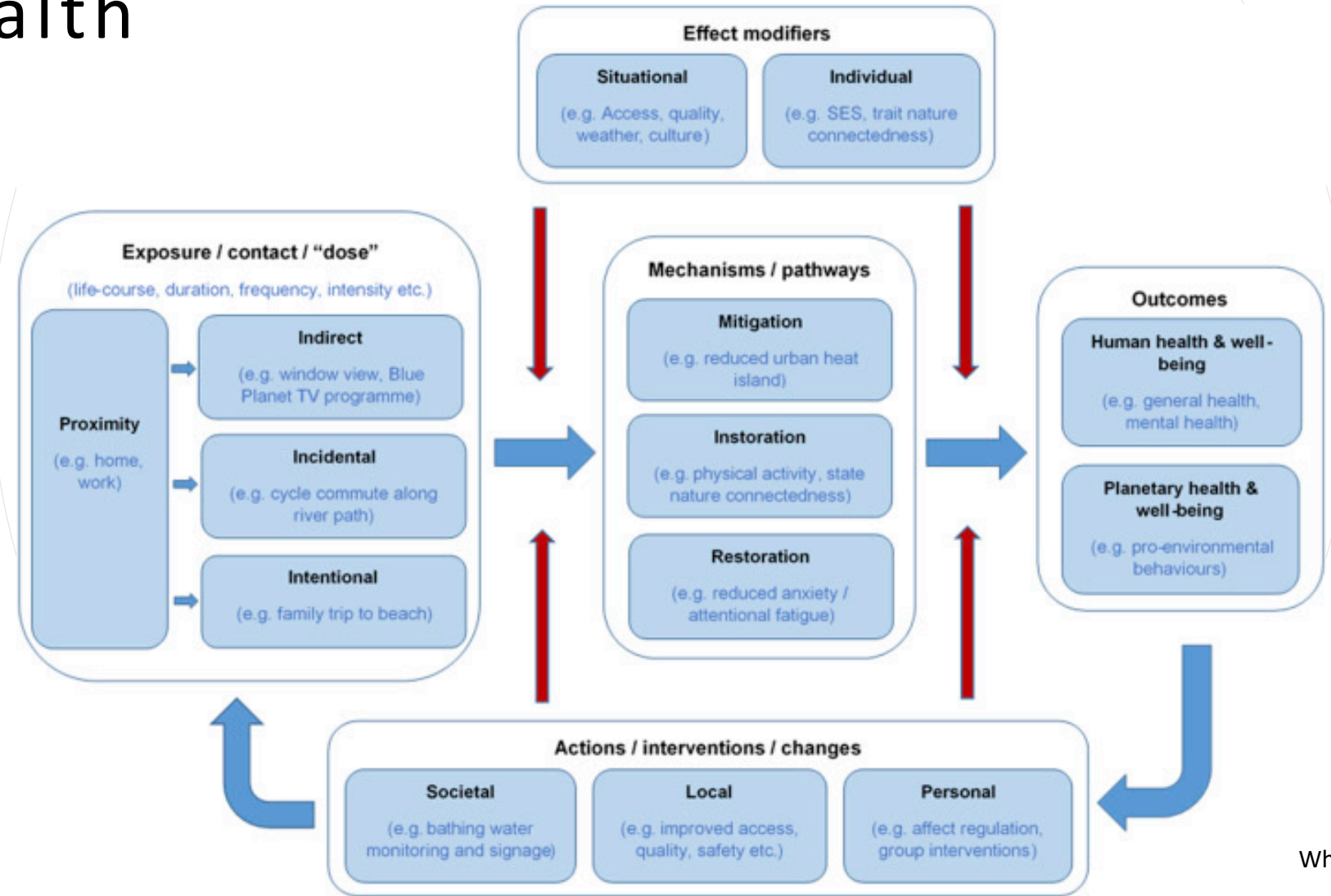
Direct and indirect pathways / effects



K
e
y
G
l
o
o
n
s
c
s
e
a
p
r
t
y
s
/
/

Improving public health

K
e
y
G
c
o
n
s
c
e
p
t
s
/
/



White at al.

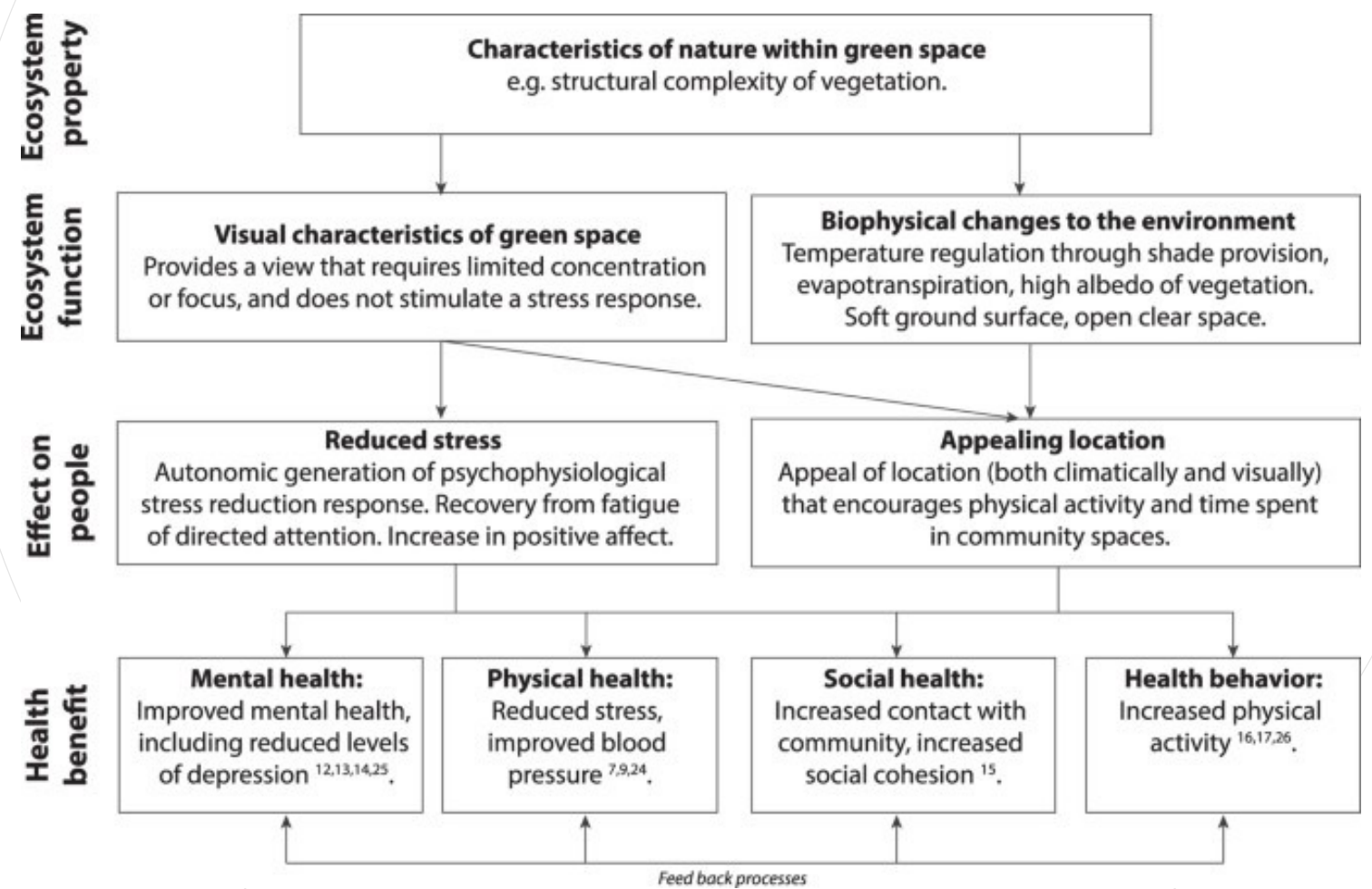
Relevance of types and characteristics

K
e
y

G
l
o
o
n
s
c
s
e
a
p
r
t
y

s

/



Shanahan et al.

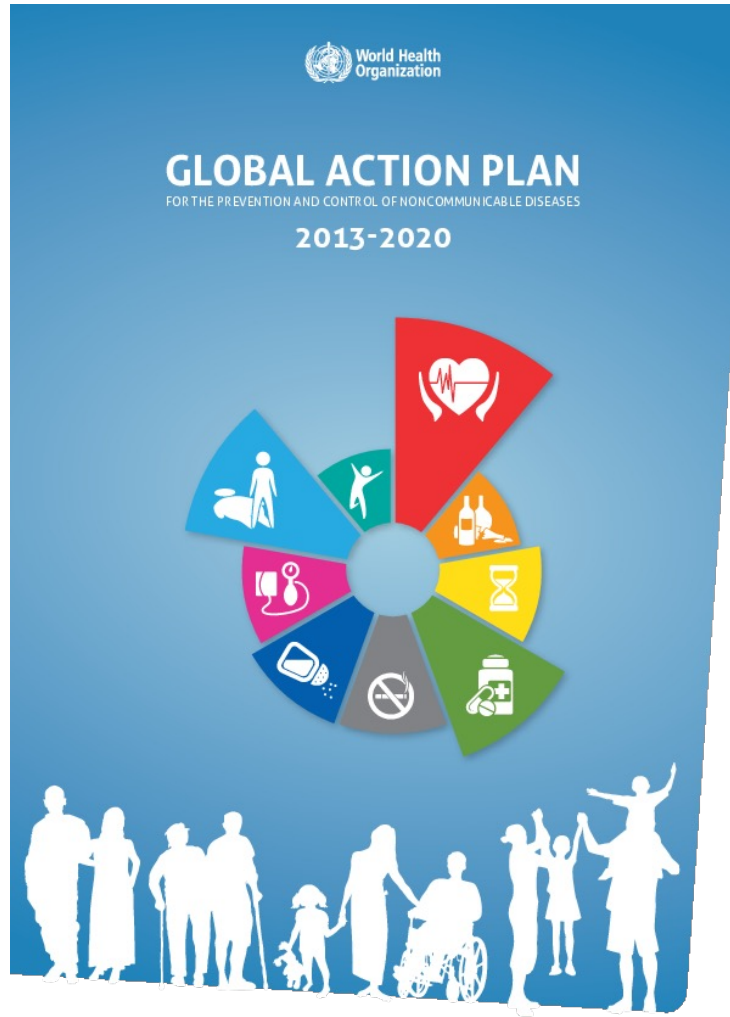
Mutually reinforcing benefits

K
e
y

G
l
o
b
a
l

c
o
n
s
c
i
e
n
t
i
f
i
c
a
l

/



K
e
y
G
c
o
n
c
e
p
t
s
/
l
o
o
s
a
r
y

Improving access



World Health Organization
Collaborating Centre on Investment
for Health and Well-being



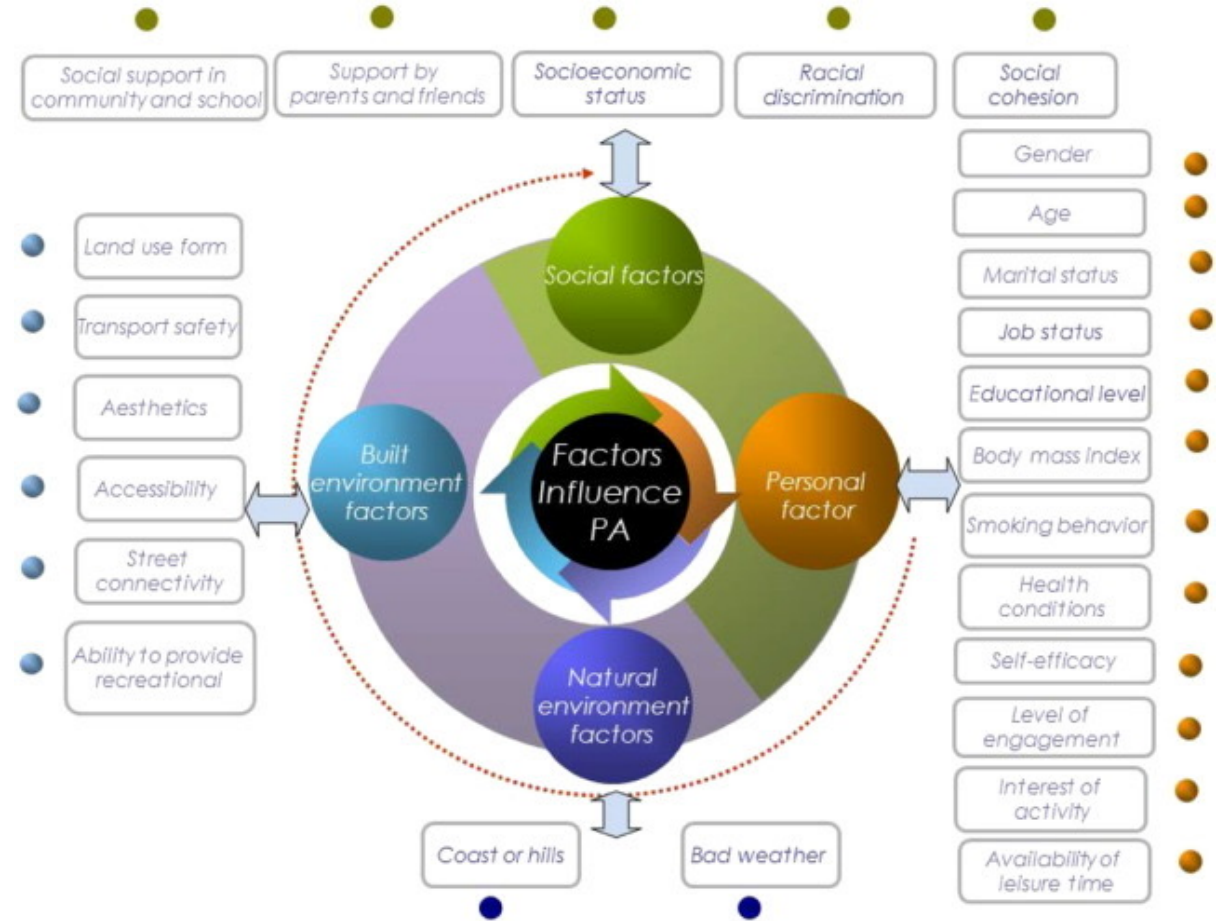
lchyd Cyhoeddus
Cymru
Public Health
Wales

Maximising health and well-being opportunities for spatial planning in the COVID-19 pandemic recovery

Liz Green, Sue Toner, Laura Evans, Lee Parry-Williams, Tom Johnson, Gemma Christian, Cheryl Williams, Sumina Azam and Mark A Bellis.

January 2022

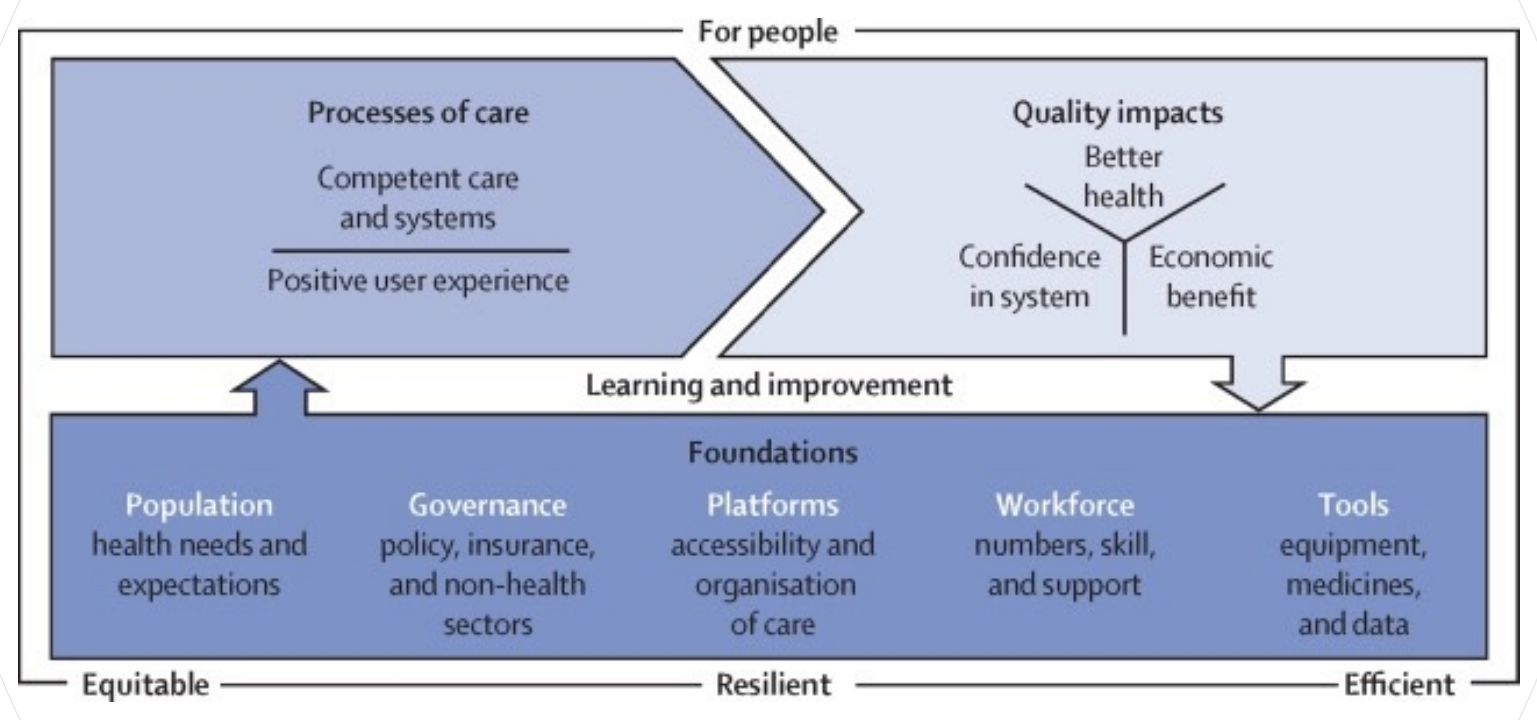
K
e
y
G
c
o
n
s
c
e
p
t
s
/
/



K
e
y

G
l
o
b
a
l
h
e
a
l
t
h

/



The Lancet

MENTAL HEALTH POLICY, PLANS AND PROGRAMMES

(updated version)

*“A mental health policy
and plan is essential to coordinate
all services and activities related
to mental health. Without adequate
policies and plans, mental disorders
are likely to be treated in an
inefficient and fragmented
manner.”*



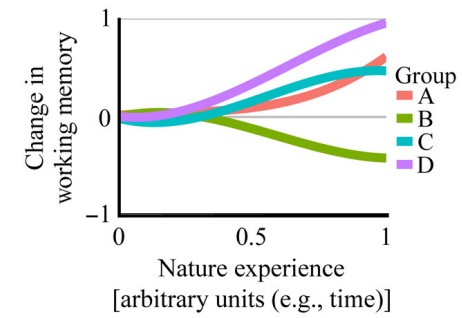
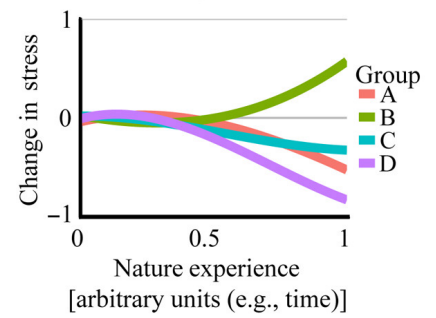
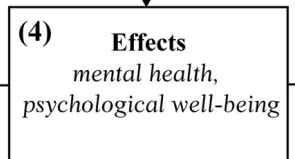
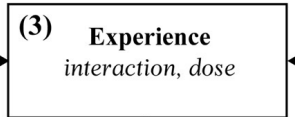
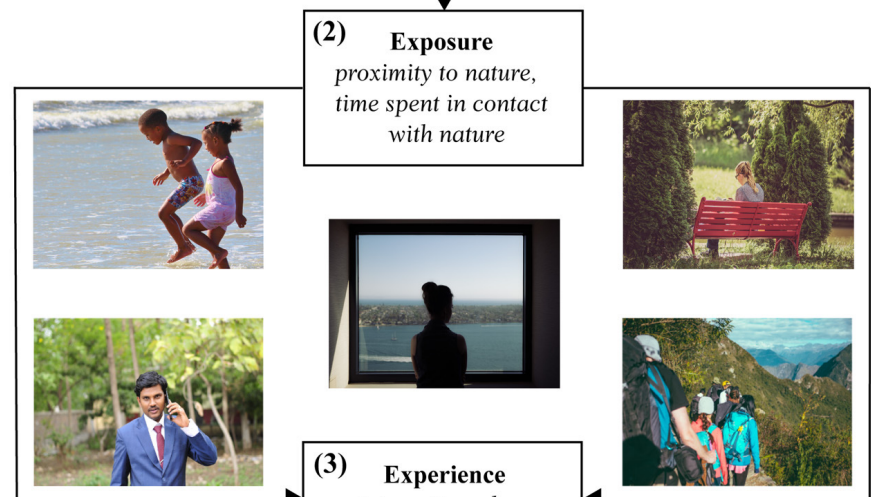
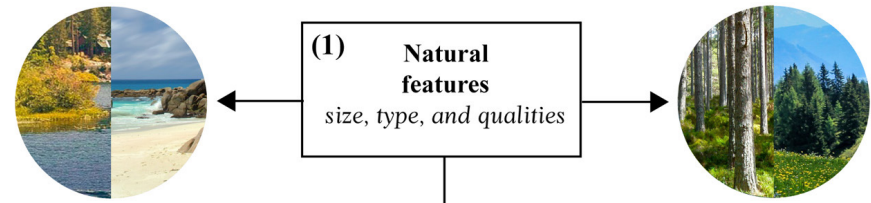
K
e
y
G
c
o
n
c
e
p
t
s

/

K
e
y
G
c
l
o
o
n
s
c
s
e
a
p
r
t
y
s
/

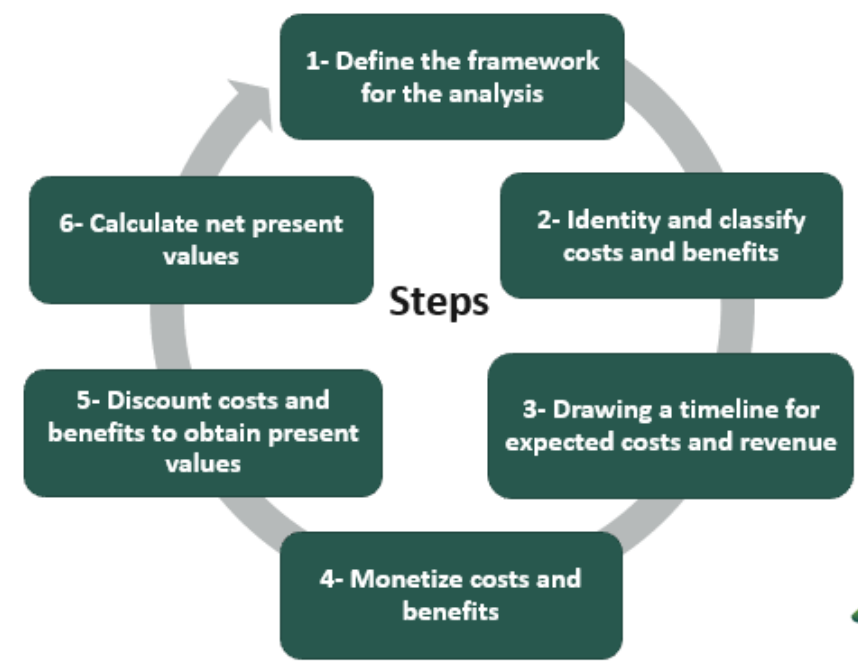
		Environmental Features	Natural Shapes and Forms	Natural Patterns and Processes
SCALE Building		Color, Water, Air Sunlight Natural Materials Views, Vistas Landscape	Simulation of Natural Features Biomorphy, Geomorphology, Biomimicry	Sensory Variability Information Richness Central Focal Point Bounded Spaces and Transitional Spaces Dynamic Balance and Tensions
PLACE Opera House				
SCALE Urban Park		Color, Water, Air Sunlight Plants, Animals Natural Materials Landscape	Botanical and Animal Motifs Simulation of Natural Features	Sensory Variability Information Richness Patterned Wholes Linked Series and Chains
PLACE Bee Sanctuary				
SCALE District		Color, Water, Air Sunlight Plants, Animals Natural Materials Views, Vistas Greenwalls	Botanical and Animal Motifs Simulation of Natural Features Trees and Columnar Support Biomorphy, Geomorphology, Biomimicry	Sensory Variability Information Richness Age, Change and Patina of Time Bounded Spaces and Transitional Spaces Integration of Parts to Wholes
PLACE Akerselva				
SCALE Neighborhood		Color, Water, Air Sunlight Plants, Animals Natural Materials Views, Vistas	Botanical and Animal Motifs Simulation of Natural Features Biomorphy, Geomorphology, Biomimicry	Sensory Variability Information Richness Age, Change and Patina of Time Bounded Spaces and Transitional Spaces Integration of Parts to Wholes Dynamic Balance and Tensions
PLACE Sørenga		Geology, Landscape Habitats, Ecosystems		
SCALE Community		Color, Water, Air Sunlight Plants, Animals Natural Materials Views, Vistas Green Walls	Botanical and Animal Motifs Trees and Columnar Support Shapes Resisting Straight Lines and Right Angles	Sensory Variability Information Richness Age, Change and Patina of Time Growth and Efflorescence Patterned Wholes Bounded Spaces and Transitional Spaces
PLACE Loseter		Geology, Landscape Habitats, Ecosystems		

K
e
y
G
c
o
n
c
e
p
t
s
/
c
l
o
s
s
a
r
y



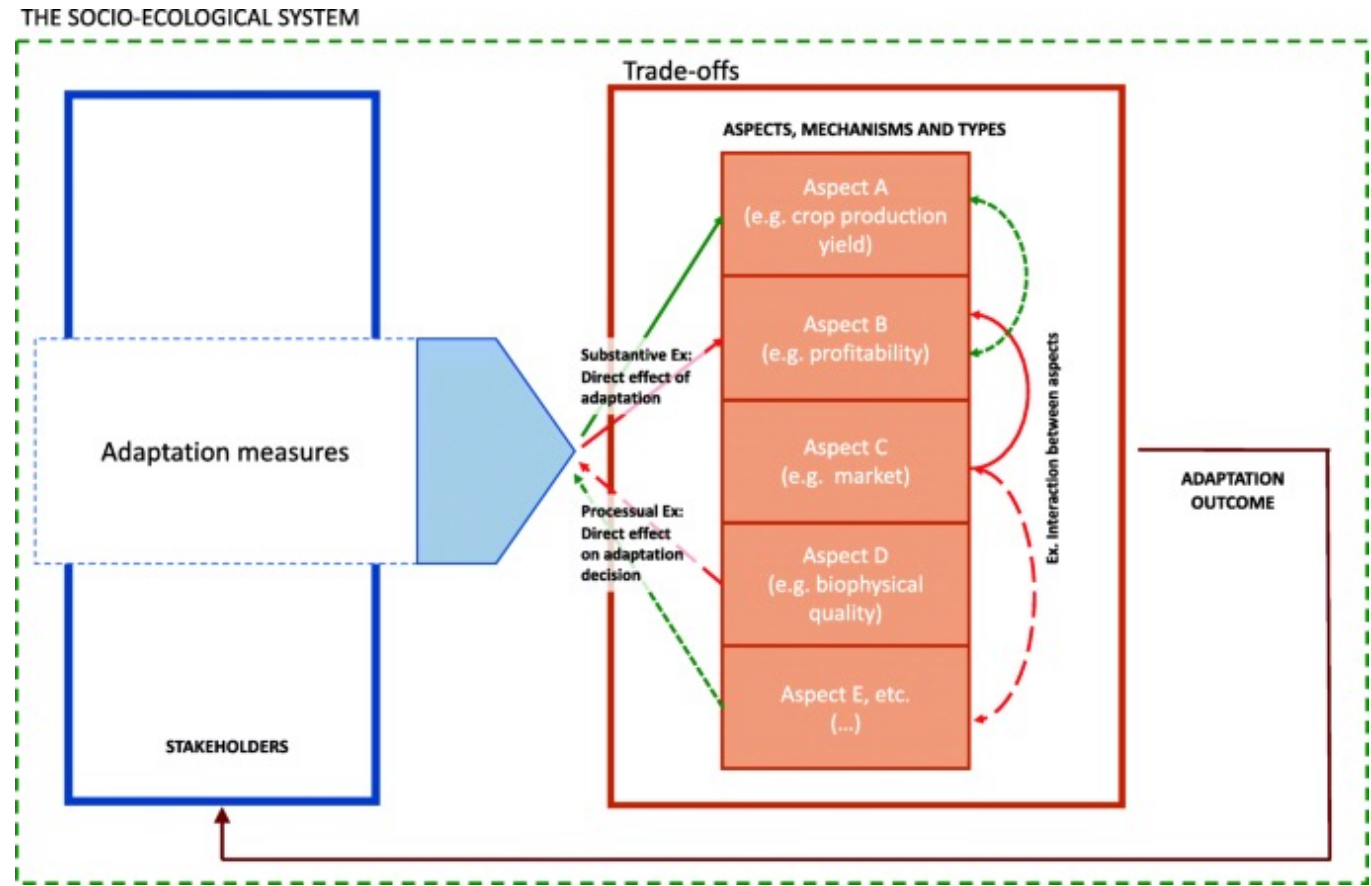
Priority setting matters!

Cost-Benefit Analysis



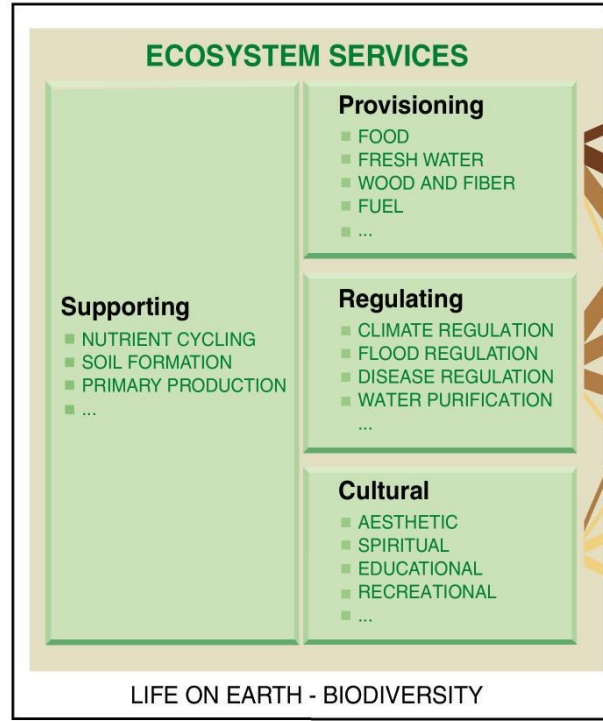
K
e
y
G
c
l
o
o
n
s
c
s
e
a
p
r
t
y
s
/
/

K
e
y
G
l
o
o
s
c
s
e
a
p
r
t
y
s
/
/



Wirehn et al.

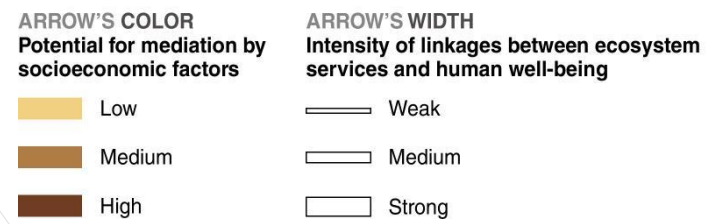
K
e
y
G
c
o
n
c
e
p
t
s
/
o
o
s
a
r
y



CONSTITUENTS OF WELL-BEING



Source: Millennium Ecosystem Assessment



MEA

Guided Q&A Session on Health and Wellbeing

- 1) Which **Threats / Challenges** do you consider most relevant with respect to preserving / enhancing Health and Wellbeing?
- 2) Which **Opportunities / Barriers** can you identify in **your Country** to progress towards the achievement of SDGs 3 (and specifically 3.4)
- 3) Which **Stakeholders / Interest Groups** can you identify?
- 4) Which **Sustainability Dimension(s)** is mostly **converging** towards this Goal?
- 5) Which Sustainability Dimension(s) is mostly **conflicting** towards this Goal?

Thank you for the attention!

mbeatrice.andreucci@uniroma1.it

“The relationship between humankind and nature can be one of respect and love rather than domination...The outcome...can be rich, satisfying, and lastingly successful, but only if both partners are modified by their association so as to become better adapted to each other...With our knowledge and sense of responsibility...we can create new environments that are ecologically sound, aesthetically satisfying, economically rewarding”

René Dubos, The Wooing of the Earth