



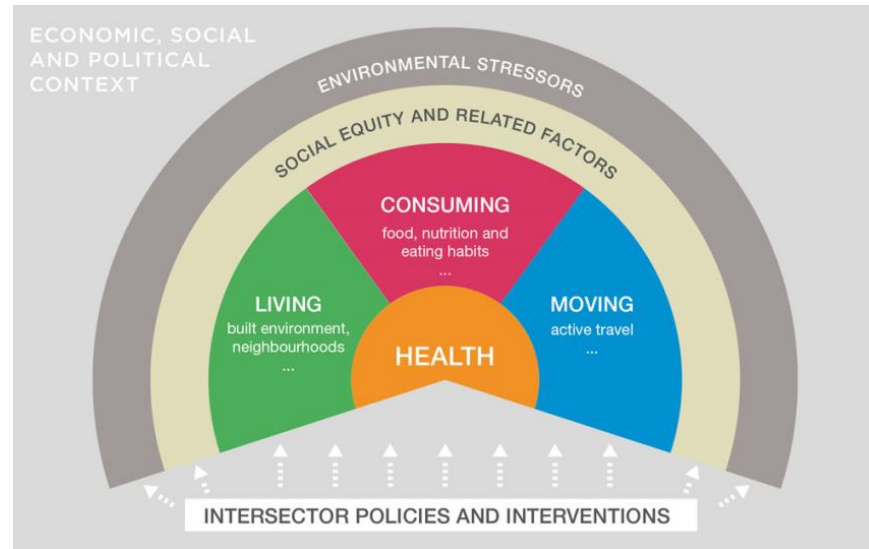
Vulnerable groups, environment and health- some insights from the INHERIT project

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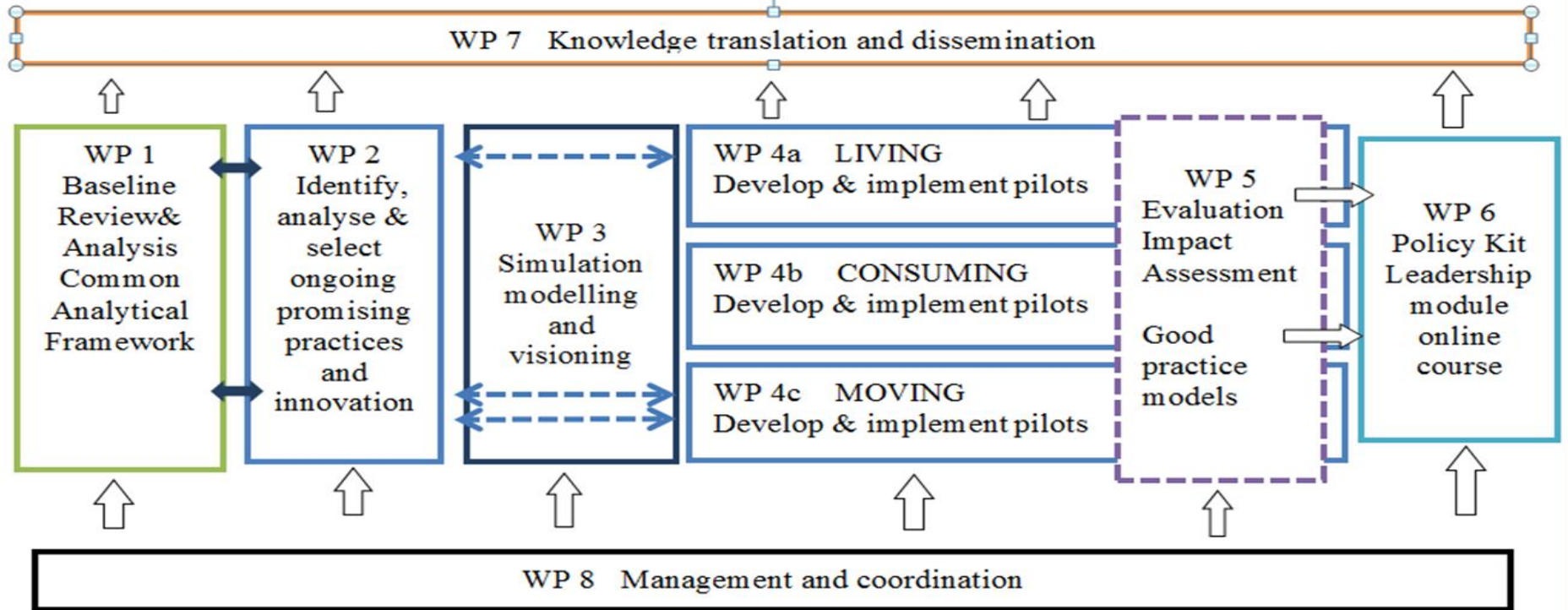
INHERIT Intersectoral Health and Environment Research for Innovation

- 48-month / 4-year Horizon 2020 project (2016-2019)
- 18 partners from around Europe, EuroHealthNet lead
- Focus on lifestyles and behaviours
- Identification and evaluation of promising **policies, practices** and **innovations** in Europe that create a triple win: environmental sustainability, health, equity
- Central themes: greenspace, energy efficient housing, food production and consumption, active transport





Overall Approach





Products

Baseline Report	http://inherit.eu/baseline-report/
Database Promising Practices	http://inherit.eu/db-results/
Conceptual Framework	Int J Environ Res Public Health. 2018 Jul 7;15(7).
Future scenarios- report & video	https://www.inherit.eu/future-scenarios/
INHERIT website	www.inherit.eu



Baseline report- Some highlights

- Our current lifestyles and behaviours are unhealthy and environmentally unsustainable and affect the local and physical environment. If a global population would adopt a European lifestyle by 2050 > natural resources of at least 2 Planet's Earth needed!
- In 2012 23% of global deaths (12.6 million) attributable to environment. In children < 5 yrs up to 26% of all deaths could be prevented if environmental risks were removed
- Our societies are becoming more unequal. In Europe, top 10% households hold 50% of total wealth and 40% least wealthy own about 3%
- In 20% richest of EU population 4.7% perceives health to be (very) bad. Among the 20% poorest, this is 14.1%



Barriers to healthy & sustainable lifestyles

- Current economic, political and social system
- Urban development
- Modern food production and consumption processes
- Our tendency to prefer convenience and rapidity
- Our disconnectedness from nature
- Our food origins
- Our daily behaviours are habitual and part of an automatic process





Baseline report- Some highlights (2)

- Need to understand & address the socio-economic & demographic trends driving the current systems
- Adapt lifestyles into sustainable practices: requires action from policy, private sector, and individuals
- Lower socio-economic groups need special attention:
 - Accumulation of health and environmental burdens
 - Fewer opportunities and capabilities to change their behaviour
 - Lower motivation to change lifestyles into more sustainable and healthy ones
 - Less knowledge how to do it



INHERIT Framework

Based on several conceptual models:

- Drivers: DESTEP
- Environment & health: eDPSEEA (Reis et al., 2013)
- Behaviour: Behavioural Change Wheel (Michie et al., 2011)
Capability, Opportunity, Motivation
- Inequalities occur at all stages

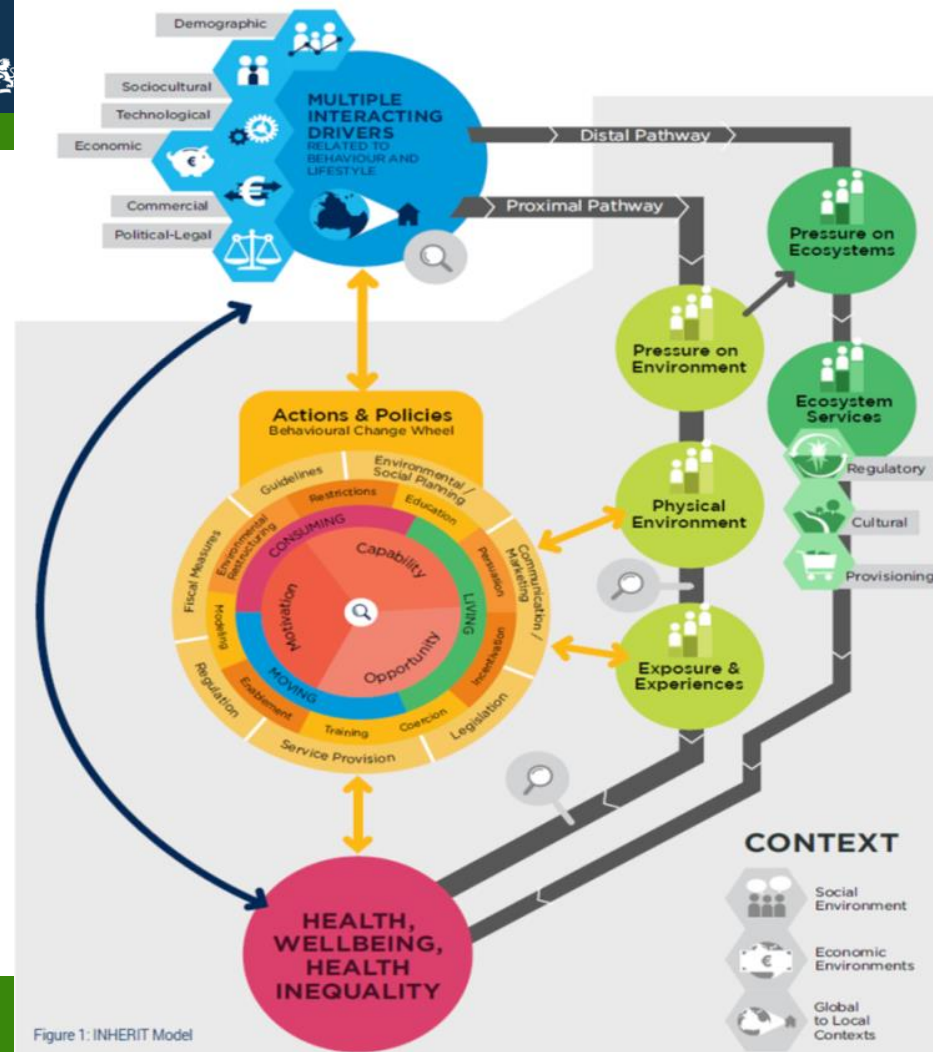


Figure 1: INHERIT Model

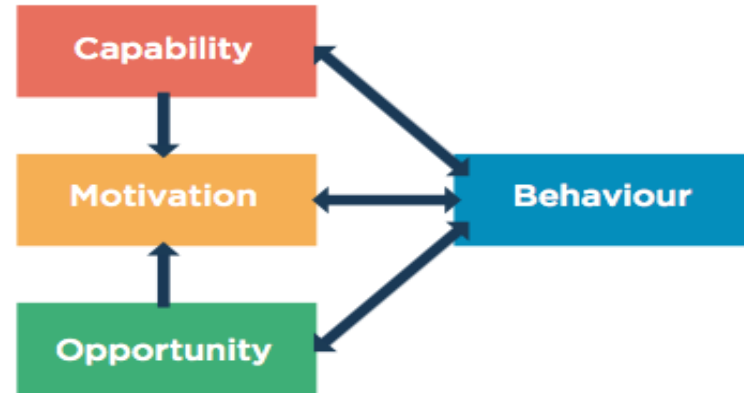


Behaviour in the INHERIT model: The COM-B system

Being psychologically or physically able to perform certain behaviours : skills, knowledge

All brain processes that activate or inhibit behaviour: both reflective and automatic mechanisms: attitudes, habits

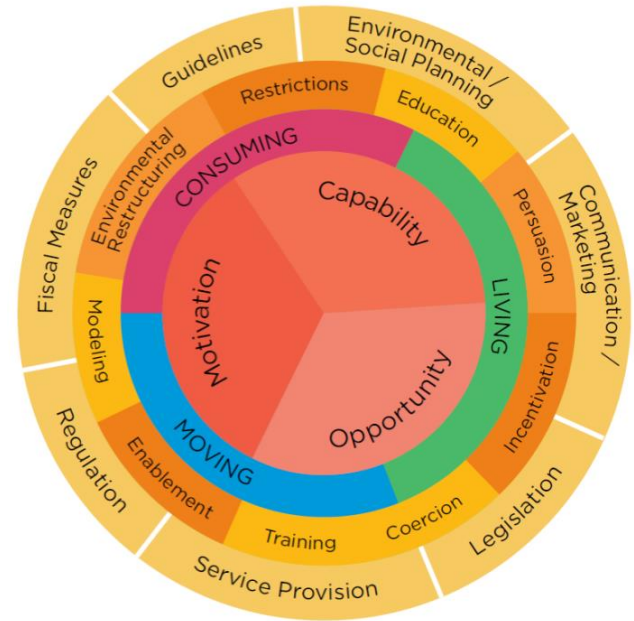
Physical and social environment that facilitates or hinders behaviour: availability, social norms





Example: Stimulating use of greenspace

- Opportunity/motivation:
 - ✓ Provide green space that is attractive, safe, easily accessible, within (perceived) walking distance, involve community, make it fun
- Capability:
 - ✓ Provide education & information, organise activities
 - ✓ Consult or involve potential users in the design



Mitchie et al., 2011, 2014



Potential gain for vulnerable groups

Greenspace:

- in particular beneficial for lower SES groups, children, older people, pregnant women
- populations in greenest areas: lower levels of health inequalities
- differences in use of greenspace

Energy efficient housing:

- lower SES most likely to live in and suffer consequences of poor quality and badly insulated housing and therefore benefit most.
- reduced fuel costs lead to greater disposable income.
- decreased fuel poverty



Potential gain for vulnerable groups (2)

More sustainable production and consumption of food:

- improved nutrition, availability and accessibility foods
- reduced levels of obesity among low SES groups

Active transport:

- reduced exposure of low SES groups to traffic-related exposure
- increased physical activity among low income and ethnic minority adults





Promising practices: INHERIT database

<http://inherit.eu/db-results/>

- Approx. 100 promising practices on greenspace, energy efficient housing, food production and consumption, active transport
- Searchable on e.g. target groups (employees/workplace, general population, low socio-economic status, children & adolescents, older people, women, other)

The screenshot shows the INHERIT database website interface. At the top, there is a navigation menu with links for ABOUT, PROJECT, PROMISING PRACTICES, FORUM 2018, MEDIA, and RESOURCES. Below the navigation is a dark blue header with the word "Database". A blue button labeled "ABOUT THIS DATABASE" is visible. The main content area is divided into two columns. The left column contains search filters: a "SEARCH" section with a text input field, and two sections for "EUROPEAN COUNTRY/COUNTRIES" and "FIELD". The "EUROPEAN COUNTRY/COUNTRIES" section has checkboxes for Austria, Belarus, Belgium, Bulgaria, and Croatia. The "FIELD" section has checkboxes for "Urban food gardens", "Living/Green space: Improving availability, quality and use" (which is checked), "Living/Green space: Other", and "Other". The right column displays "Found 20 Results" and a list of search results, including "Green belt and green area program in Vitoria-Gasteiz", "GOSASUN concrete initiative 'Thinking Fadura'", "Deglavas street Landfill", "Pocket Parks", "Madrid Rio – urban infrastructure redevelopment plan", "Travel Smart and Your 30", "Bee Urban – social entrepreneurship to promote a greener city and local commitment", and "Die Fssbare Stadt Andernach (Fdible City Andernach) – urban gardening plan".



Evaluation of interventions

- All include equity component
- In 12 pilot projects:
qualitative evaluation of
collaboration between stakeholders
- In 6 pilot projects:
quantitative evaluation of impact on
health behaviour and impact on
triple win
- In 3 pilot projects:
cost benefit analyses

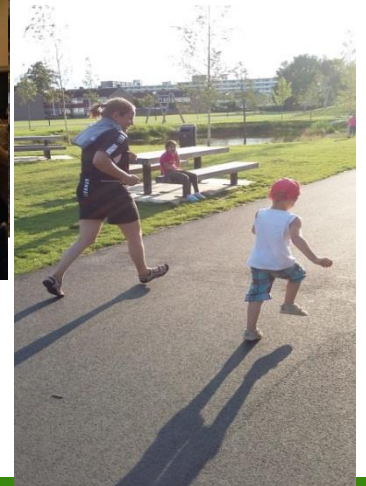
Pilot study

1. Food garden
2. Gardening with green gyms for meat free Mondays
3. GemuseAckerdemie
4. Ghent en Garde
5. PROVE
6. Restructuring residential areas
7. Restructuring green space
8. Sustainable food in public schools
9. Thinking Fadura
10. Place Standard Tool Riga
11. Place Standard Tool Macedonia
12. Urban Cyclers
13. Eco Inclusion
14. Malvik Path
15. Retrospective analysis on energy efficient investments
16. Lifestyle e-coaching



Example greenspace- Restructuring greenspace

- Restructuring park in low-income neighbourhood in Breda (NL) involving residents and other stakeholders
- Activities organized together with residents
- Challenges: declining feelings of ownership among residents, in particular youngsters
- As part of INHERIT: Observations of use (SOPARC), evaluation of collaboration between stakeholders (focus groups). Comparison with baseline data





Example food - The Food Garden

<http://www.voedseltuिन.com>

- Voedseltuिन Rotterdam stands for a healthy city, a pro-sustainable urban society, with healthy food for everybody, without poverty and social exclusion
- Offers sustainably grown seasonal vegetables for the Food Bank Rotterdam
- Place to meet and help to produce food





Example energy efficient housing- SMART-UP

http://cordis.europa.eu/project/rcn/194597_en.html

- Encourage the active use of Smart Meters and In-House Displays by vulnerable customers
- Training program for installers, social workers and other frontline staff in contact with vulnerable people
- One-to-one and on-going support for vulnerable groups
- Insight in specific needs and on the ways to appropriately communicate with vulnerable groups and help them take profit of smart metering

SMART-UP
CONSUMER EMPOWERMENT IN A SMART METER WORLD



Active transport: bicycle lessons

- Organising bicycle lessons for school children, minorities
- Percentage of children cycling to school in low SES neighbourhood in Rotterdam increased from 20 to 35% in one year
- Some requirements: safe cycle lanes, have access to a bike





Conclusions & recommendations

- Wealth distributed unequally, growing problem. Unhealthy behaviours and lifestyles put pressure on health and the environment
- Interventions to change behaviours and lifestyles into more healthy and sustainable ones in particular beneficial for vulnerable groups
- Many inspiring policies and interventions, incl. targeting vulnerable groups
- Limited insight in effect and transferability of interventions
- Lack in knowledge on how to reach vulnerable groups that need healthier lifestyles the most
- Important to involve target population
- Changing behaviours requires a combination of structural & behavioural measures; and of bottom-up, local initiatives & upstream measures, aiming at changing driving forces



More information

INHERIT website

www.inherit.eu

Baseline Report

<http://inherit.eu/baseline-report/>

Database Promising Practices

<http://inherit.eu/db-results/>

Conceptual Framework

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The researchers thank the INHERIT project team for their contributions leading to these results. The project is funded by the European Commission (FP7/2007-2013) under grant agreement no. 282996