

Before class starts:

1) Log into Zoom:

Option 1: Access the call via browser: <https://bit.ly/3lcdXEc>

Option 2: Open **zoom.ut.ee** OR the “Zoom” app on your computer:

Meeting ID: 992 5621 0355

Passcode: 730948

2) Open this Miro board via browser:

<https://bit.ly/3ifyc9n>

+ Sit to the front of the class please :-D



TARTU ÜLIKOOL



Project design for strengthening health systems

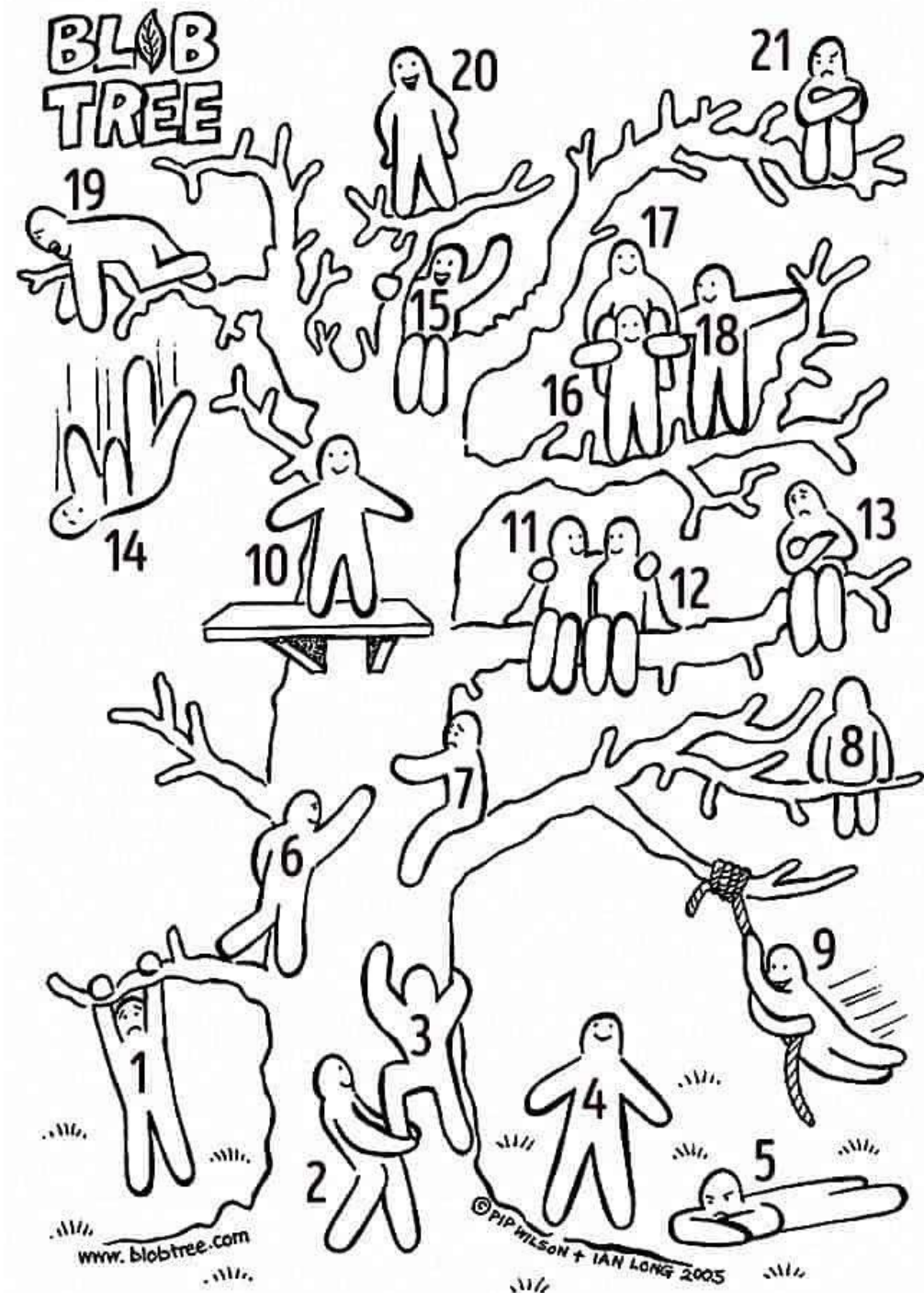


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TARTU, ESTONIA

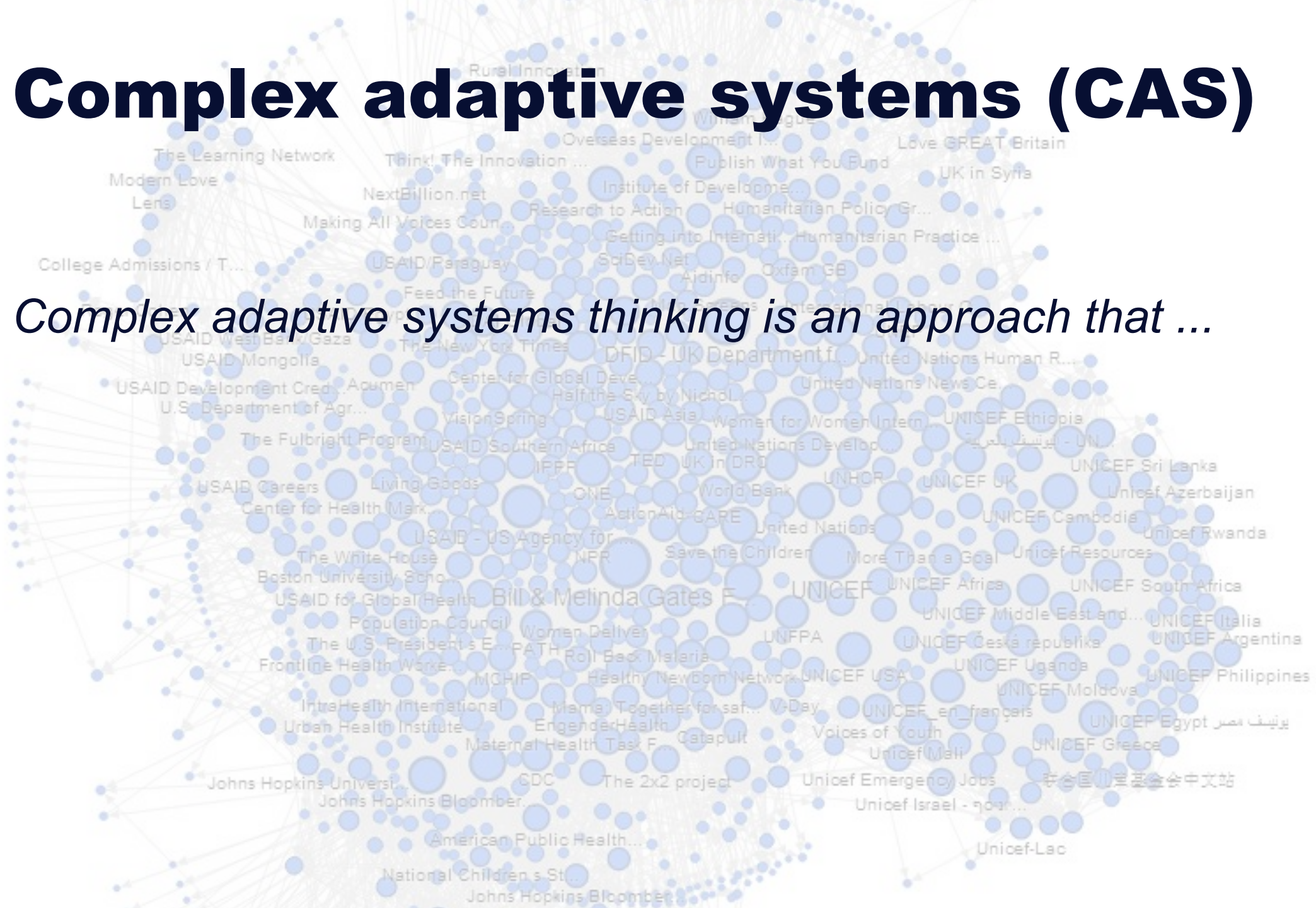
Today's agenda:

- Introduction to Health systems
 - Complex adaptive systems (CAS)
 - Health System Building Blocks
 - Systems thinking
- Developing a health project
 - Project management cycle
 - Analysis phase (Problem tree<-> Objective tree)
- Targets and Indicators
- Budgeting
- Final project guidelines



Complex adaptive systems (CAS)

Complex adaptive systems thinking is an approach that ...



The characteristics of complex adaptive systems include:

- a large number of elements which interact dynamically
- any element in the system is affected by and affects several other systems
- non-linear interactions, so small changes can have large effects
- openness, so it may be difficult to define system boundaries
- a constant flow of energy to maintain the organisation of the system
- a history whereby the past helps to shape present behaviour
- elements in the system are not aware of the behaviour of the system as a whole and respond only to what is available or known locally

Health Foundation, 2010

Complex adaptive systems (CAS)

Complex adaptive systems thinking is an approach that challenges simple cause and effect assumptions, and instead sees healthcare and other systems as a dynamic process. One where the interactions and relationships of different components simultaneously affect and are shaped by the system.

(Health Foundation, 2010)

Is health a complex adaptive system? HOW?

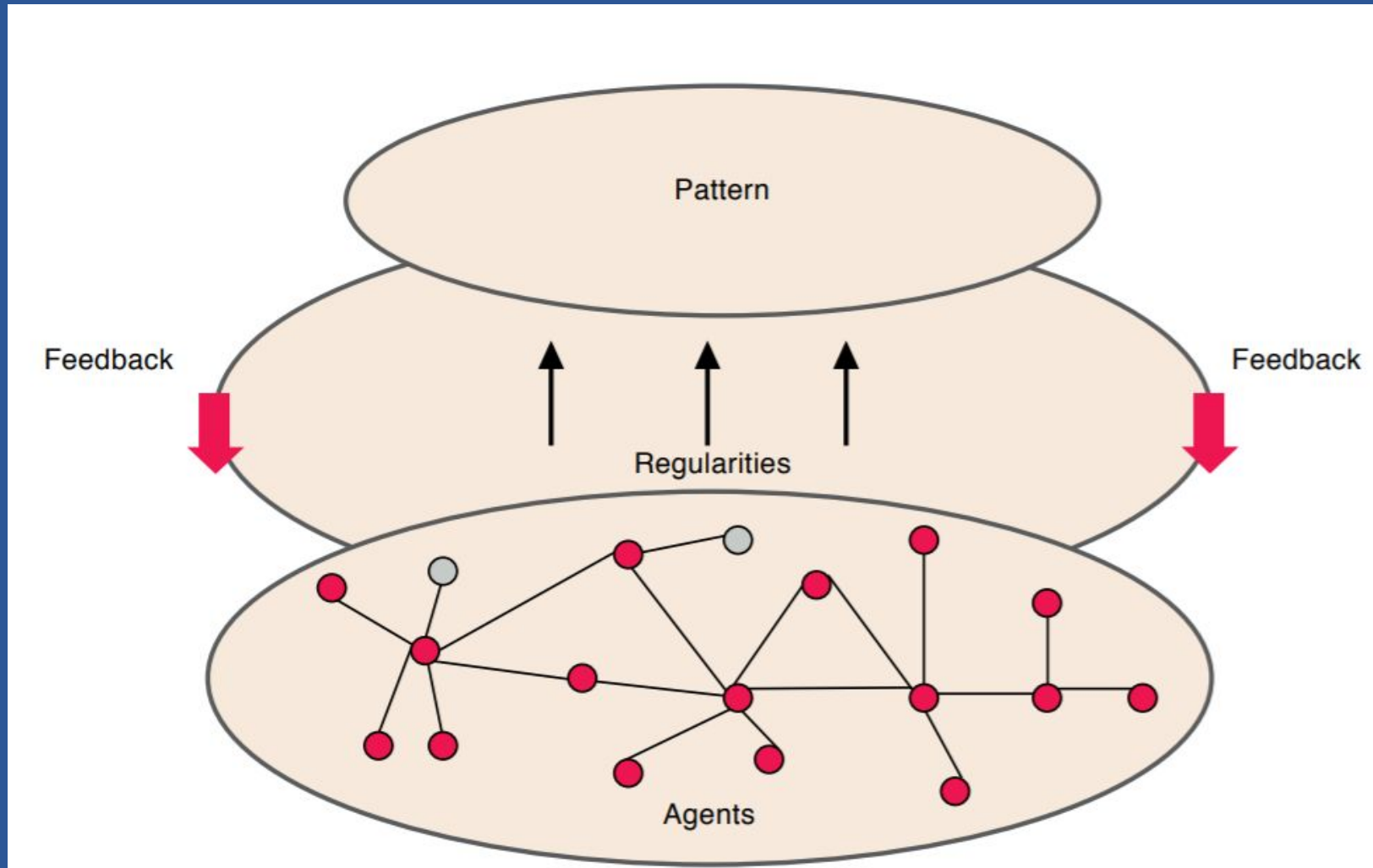


Figure 2. Simplified scheme of a complex adaptive system (Health Foundation, 2010)

COMMON SYSTEMS CHARACTERISTICS (WHO)

Most systems, including health systems, are:

- Self-organizing
- Constantly changing
- Tightly linked
- Governed by feedback
- Non-linear
- History dependent
- Counter-intuitive
- Resistant to change



Figure 3. Network (MaxPixel)

What is a health system?

The World Health Organization (2007) defines health systems as follows:

A health system consists of all organizations, people and actions whose primary intent is to promote, restore or maintain health. This includes efforts to influence determinants of health as well as more direct health-improving activities.



Figure. Health System Building Blocks (De Savigny, et al., 2009)

SYSTEM BUILDING BLOCKS



ACCESS
COVERAGE



QUALITY
SAFETY

OVERALL GOALS / OUTCOMES



THE SIX BUILDING BLOCKS OF A HEALTH SYSTEM: AIMS AND DESIRABLE ATTRIBUTES

Systems thinking in health

TEN STEPS TO SYSTEMS THINKING IN THE HEALTH SYSTEM

I. Intervention Design

1. Convene stakeholders
2. Collectively brainstorm
3. Conceptualize effects
4. Adapt and redesign

II. Evaluation Design

5. Determine indicators
6. Choose methods
7. Select design
8. Develop plan
9. Set budget
10. Source funding.

Figure 4. Health systems thinking (De Savigny, et al., 2009)

Developing a health project

Analysis phase

- Situation analysis
- Identification of problems
- Stakeholder analysis
- Problem analysis (Problem tree)
- Objective analysis (Objective tree)
- Alternative analysis

Planning phase

- Developing a project planning matrix (Logframe, alternative)
- Activity scheduling
- Resource scheduling

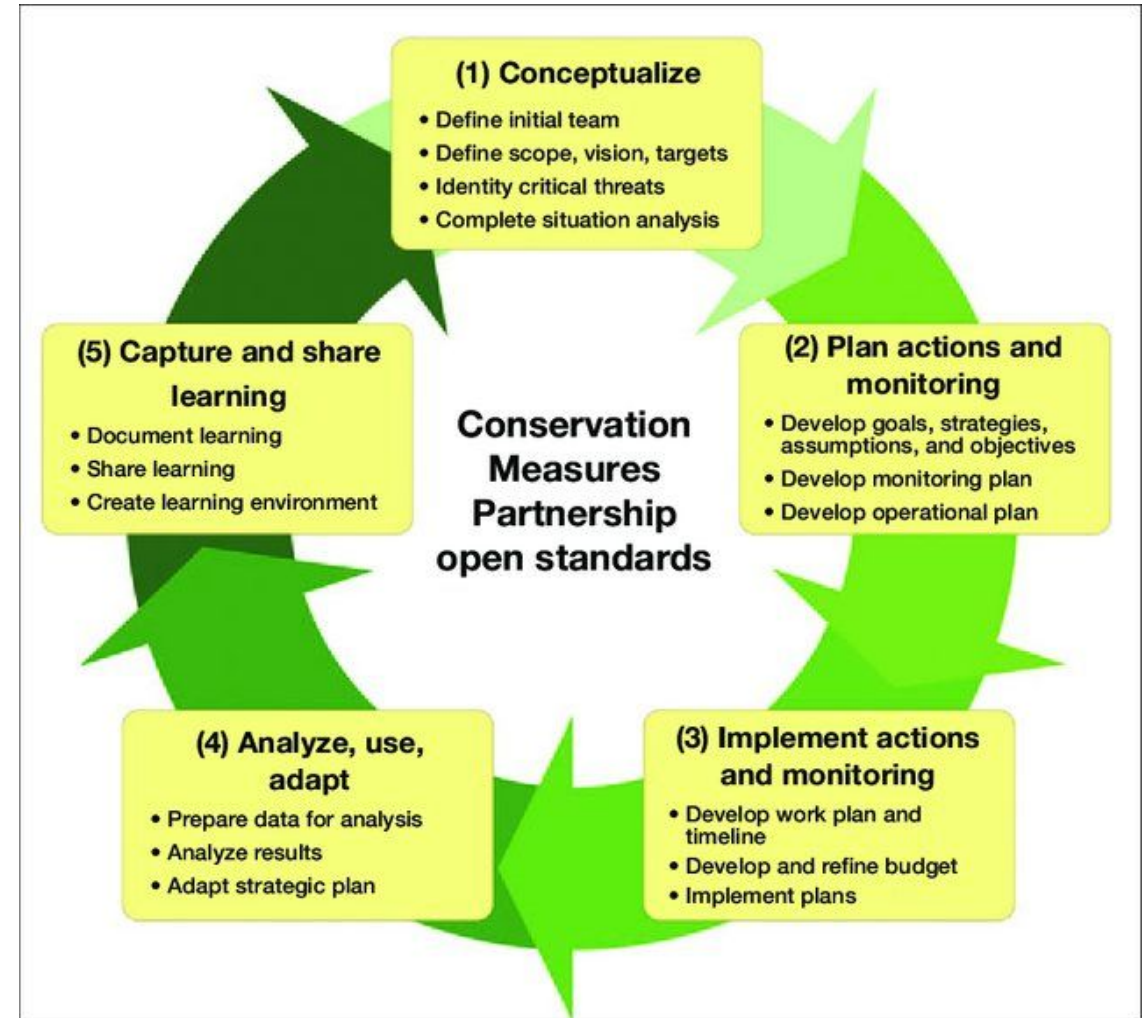


Figure 5. Project management cycle (Grantham, et al., 2010)

How to narrow a project topic?



Situation analysis

Key questions to ask:

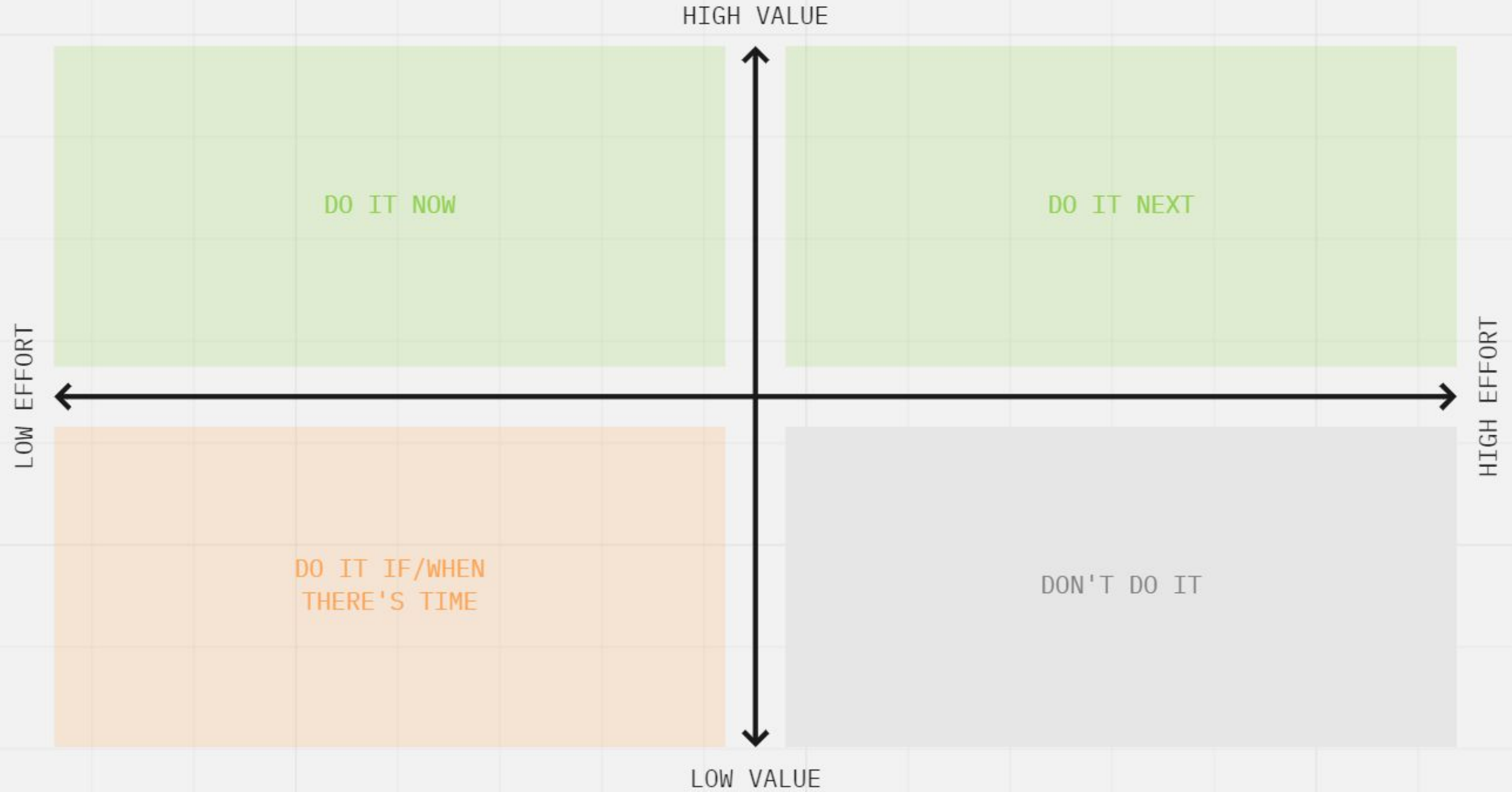
- What are the health and health services problems?
- How many cases do we have, how big is the problem?
- When does the problem occur?
- Where do the cases or problems occur?
- Who is affected?
- Why does the problem occur?
- What kind of measures did we take already?
- What were the results?
- What or what else can be done?

Priority setting

- Why prioritize?
 - There are always limited resources available that need to be distributed according to a systematic prioritization
- When to prioritize?
 - The priority-setting exercise generally follows a situation analysis and precedes decisions on resource allocation and planning.
- Who should prioritize?
 - Relevant stakeholders depending on the specific project/policy measure.
 - These may include: government (ministries), professional bodies, NGOs, members from the population, etc.
- How to prioritize?
 - Identify the population groups with a highest risk
 - Identify the most important population health problems

(Terwindt, F. et al., 2016)

Eisenhower matrix/ 2x2 prioritization matrix



criteria for priority setting

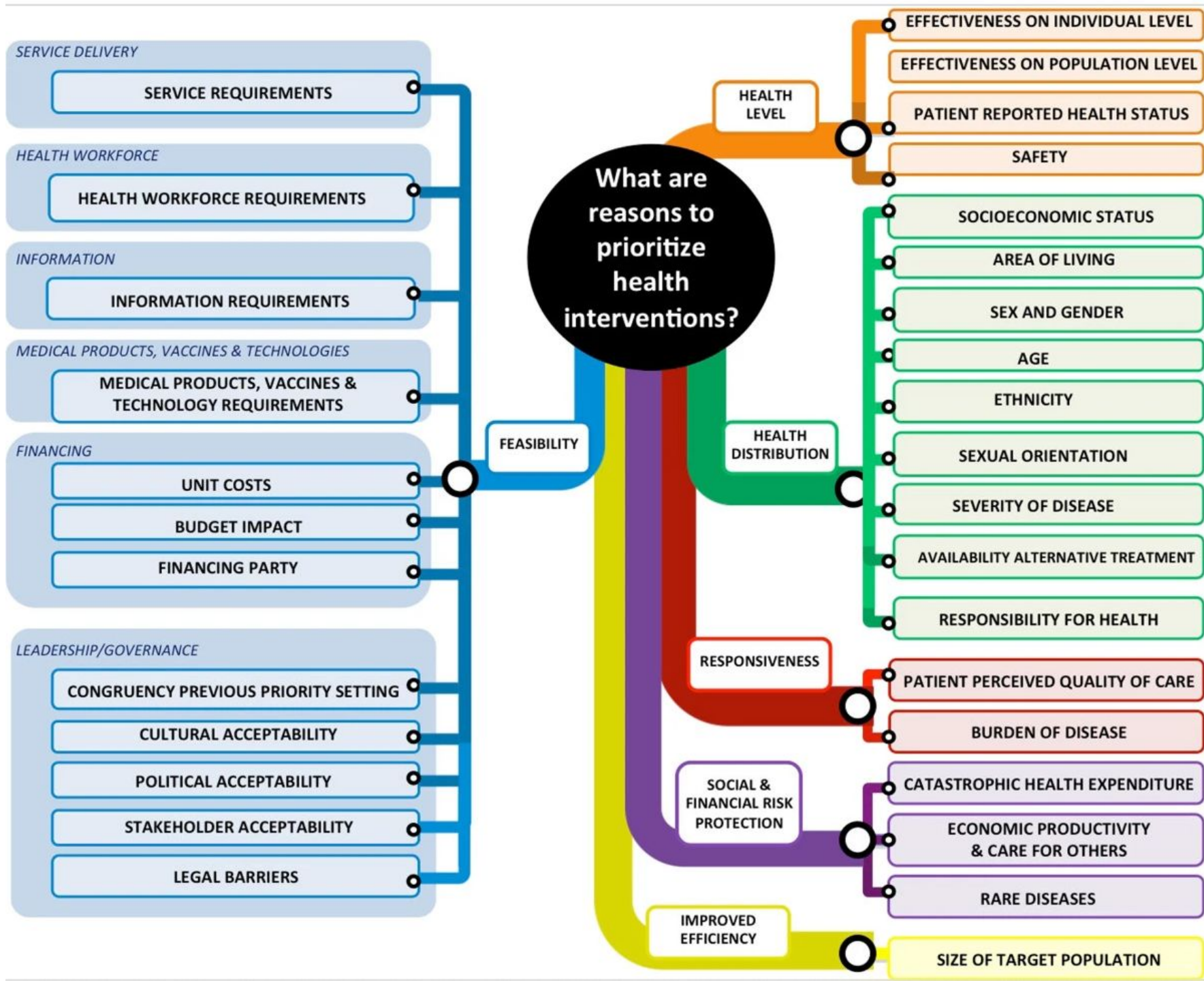


Figure 6. Priority setting criteria for health interventions (Tromp, N- et al., 2012)

stakeholder mapping

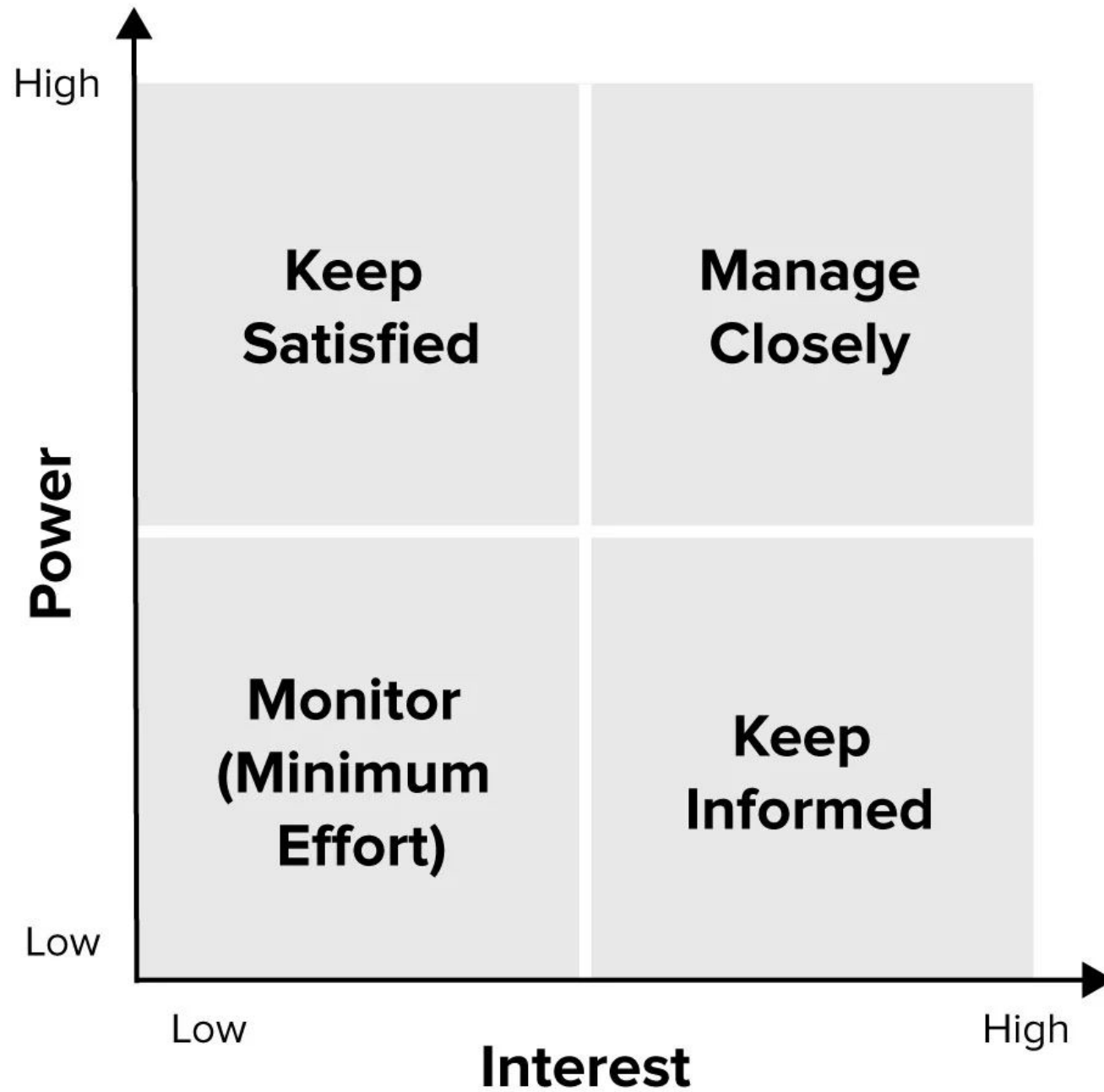


Figure 7. Stakeholder mapping diagram (MindTools)

stakeholder mapping

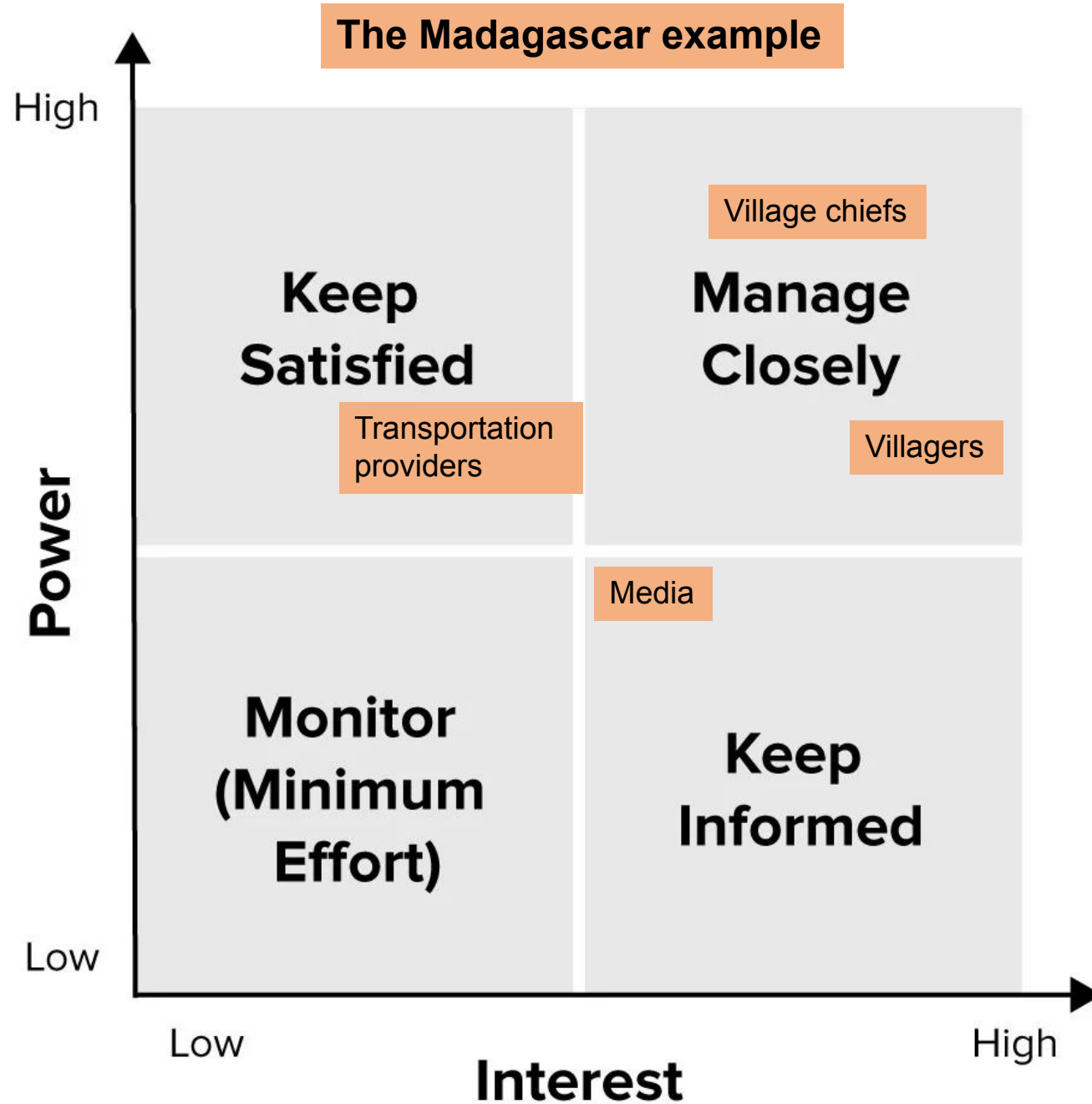


Figure 7. Stakeholder mapping diagram (MindTools)

Key stakeholders and their role in operational planning.

From the World Health Organization (2016) publication, “Strategizing national health in the 21st century: a handbook.”

ACTOR	ROLE
MoH	<ul style="list-style-type: none"> ▶ Ensures link between strategic and operational planning ▶ Provides clear guidance on operational planning (templates, tools, modalities, etc.) ▶ Technically supports budget centres in their operational planning processes ▶ Synthesizes and aggregates operational plans to feed into national health planning exercises
State and parastatal agencies (e.g. bureau of statistics, inspector general's office)	<ul style="list-style-type: none"> ▶ Lead operational planning for their respective budget centres ▶ Liaise with MoH for guidance and technical support ▶ Ensure that all stakeholders relevant to the work of the budget centre are adequately involved in the operational planning process
Other sectors (e.g. education, labour, etc.)	<ul style="list-style-type: none"> ▶ Where intersectoral action is needed to reach a specific objective or target, the relevant other sector(s) must be brought into the budget centre's operational planning process
CSOs	<ul style="list-style-type: none"> ▶ Provide data, information and knowledge ▶ Ensure that CSO activities are aligned with and part of the relevant budget centre's operational plan

Regional/district health authorities

- ▶ Lead and coordinate at local level the operational planning process
- ▶ Bring all stakeholders on board into the operational planning process, ensure coordination between different activities
- ▶ Provide supervision and guidance for lower levels of the health system
- ▶ Implement operational plan
- ▶ Liaise with national level for guidance and coherence in plans across the country

Community groups

- ▶ Represent the community in operational planning dialogue
- ▶ Provide feedback on health services and system
- ▶ Work with local health authorities to implement operational plan, pointing out any bottlenecks and challenges when necessary

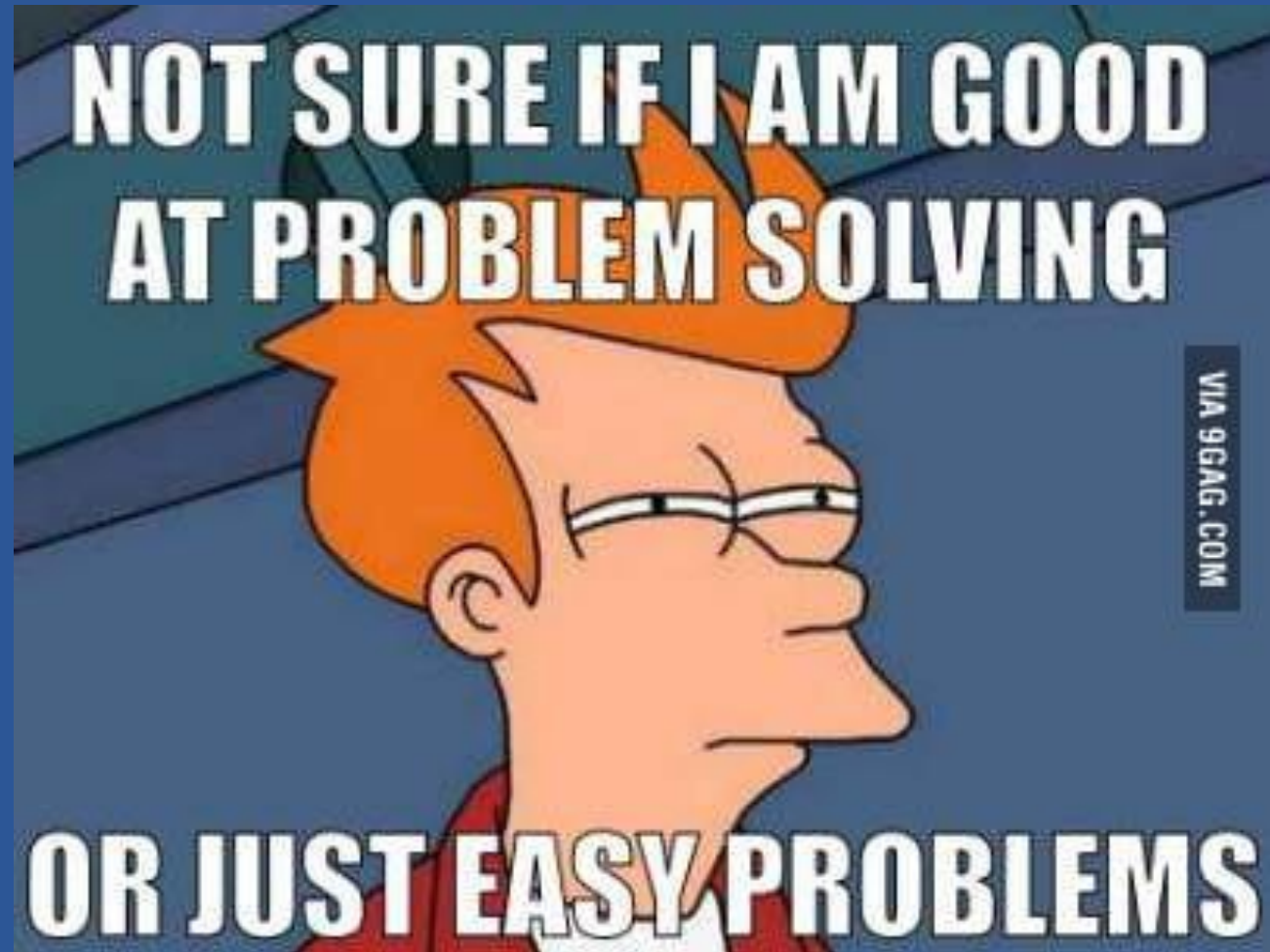
Private sector

- ▶ Participate meaningfully in district-level operational planning exercise
- ▶ Strategize with stakeholders how the private sector can contribute and work towards operational planning targets

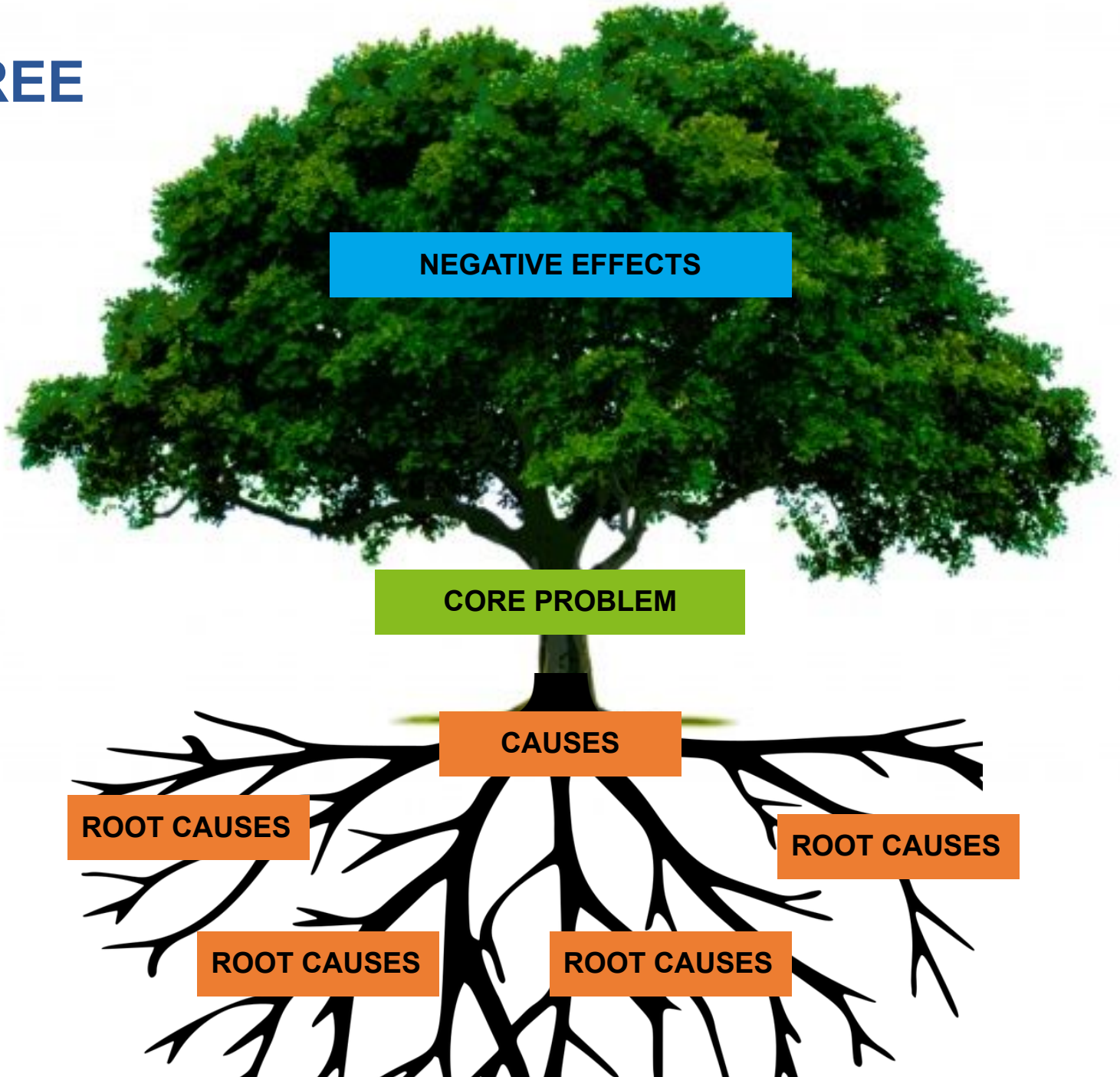
Development partners

- ▶ Technically support budget centre where necessary to convene and coordinate operational planning exercise
- ▶ Actively participate in operational planning evidence examination, dialogue and debate
- ▶ Provide monies for implementation

Problem analysis

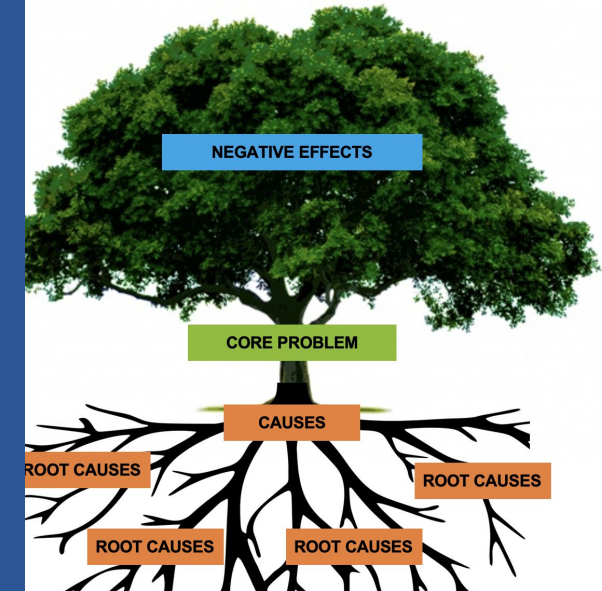


PROBLEM TREE



The problem tree

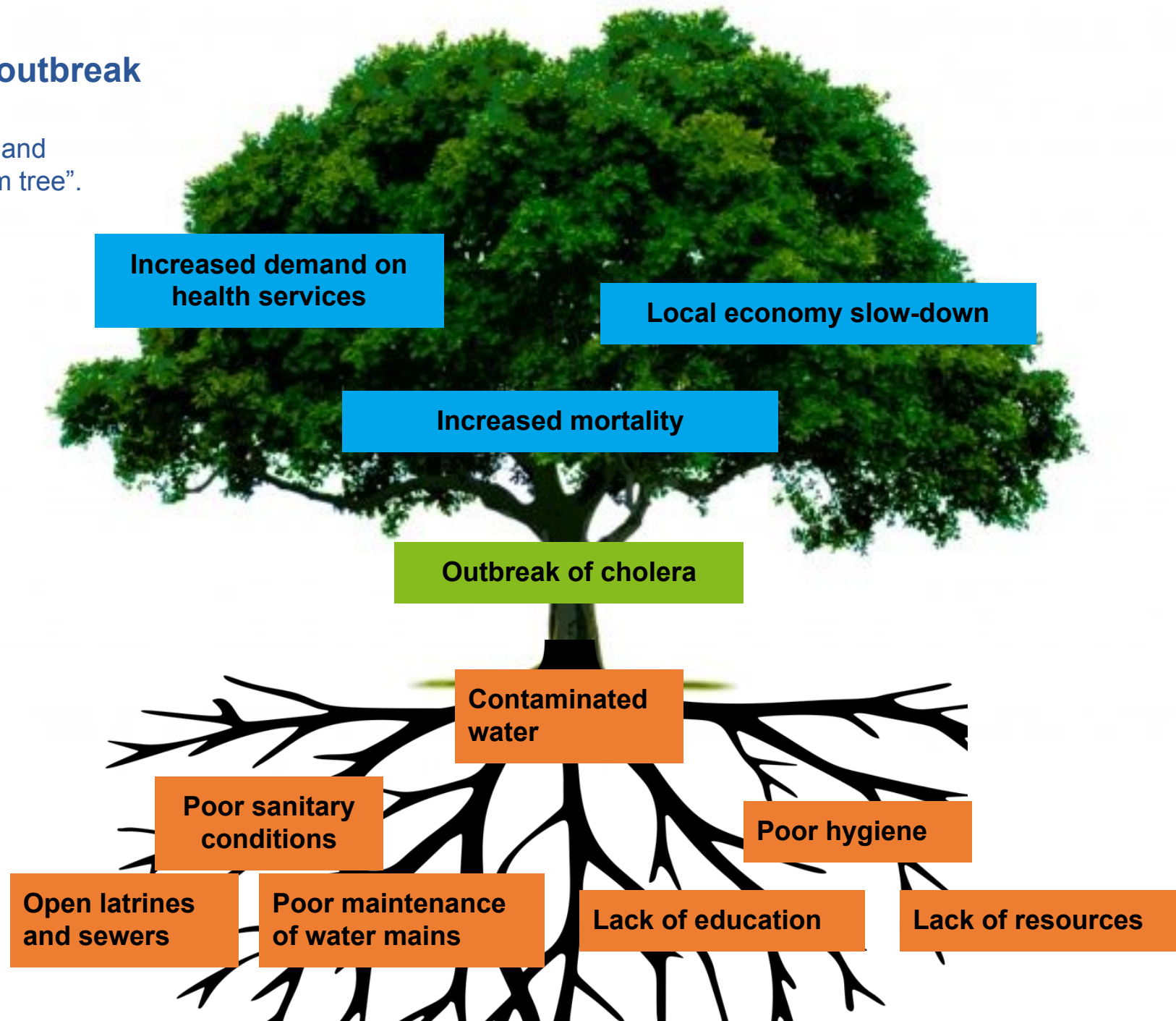
- Aim: to analyse in a systematic way the causes and effects of an issue or problem.
- It helps to:
 - break down the problem into smaller pieces
 - identify central issues and arguments
 - identify which further information or evidence is needed to solve the problem in hand
- Start with:
 - Discussing and agreeing on the problem to analyse
 - Identifying the causes of the main problem (roots)
 - Identifying the consequences of the problem (branches)
 - NB! Discussion and argumentation are essential!



(From Wageningen University, Problem tree)

Example: Cholera outbreak

Based on the “Monitoring and Evaluation toolkit. Problem tree”.



Group exercise- problem tree

Topic	University	Student
Adolescents' mental health in Europe	MUNI	Elia Evangelisti
Adolescents' mental health in Europe	MUNI	Serena Sorge
Adolescents' mental health in Europe	UT	Linda Kasela
Adolescents' mental health in Europe	UT	Viktorija Lokteva
Climate change: an existential threat and a health crisis	MUNI	Lorenzo Legittimo
Climate change: an existential threat and a health crisis	MUNI	Khaled Saed
Climate change: an existential threat and a health crisis	UT	Sabrina Mahar
Climate change: an existential threat and a health crisis	UT	Martin Ojamaa
Health in times of crises	MUNI	Federico Agneta
Health in times of crises	MUNI	Cecilia Cardillo
Health in times of crises	UT	Simon Akamine
Health in times of crises	UT	Carmen Kuusk
Improving clinical quality of care in low-income settings	MUNI	Olga Seklerentou
Improving clinical quality of care in low-income settings	UT	Rebekka Helena Pindma
Improving clinical quality of care in low-income settings	UT	Jaan Märten Huik
Improving clinical quality of care in low-income settings	UT	Anna Tisler
Increasing access to care for refugees	MUNI	Mohammed Mazin Ahmed Al-Anssari
Increasing access to care for refugees	MUNI	Anna Polcrová
Increasing access to care for refugees	UT	Marta Kohal
Increasing access to care for refugees	UT	Ingrid Kiisk
Maternal health: increasing survival for mothers and newborns	MUNI	Benny Heepmann
Maternal health: increasing survival for mothers and newborns	UT	Malla Pauline Koskela
Maternal health: increasing survival for mothers and newborns	UT	Heleriin Laur
Maternal health: increasing survival for mothers and newborns	UT	Karoliina Inno
Neglected tropical diseases	MUNI	Nisarat Changchroenkul
Neglected tropical diseases	UT	Beatrice Marlene Metsaorg
Neglected tropical diseases	UT	Mari Liis Sukk
Neglected tropical diseases	UT	Christer Daniel Sirkel
Orphan drugs and rare diseases	MUNI	António Queiroz
Orphan drugs and rare diseases	UT	Karl Robert Kuum
Orphan drugs and rare diseases	UT	Karl Allikvee
Orphan drugs and rare diseases	UT	Martin Špol
Tackling antimicrobial resistance in low-income settings	MUNI	Nahom Ghezai
Tackling antimicrobial resistance in low-income settings	MUNI	Kristine Rettedal Christiansen
Tackling antimicrobial resistance in low-income settings	MUNI	Ekaterina Volevach
Tackling antimicrobial resistance in low-income settings	UT	Elessar Eetu Hopeapuu

Some advice:

- Decide on just one core problem related to your project topic
- Phrase your problem as a negative statement
- At this stage do not think in detail what your project will be about, just focus on the problem analysis exercise
- Take time and think through the causal pathways

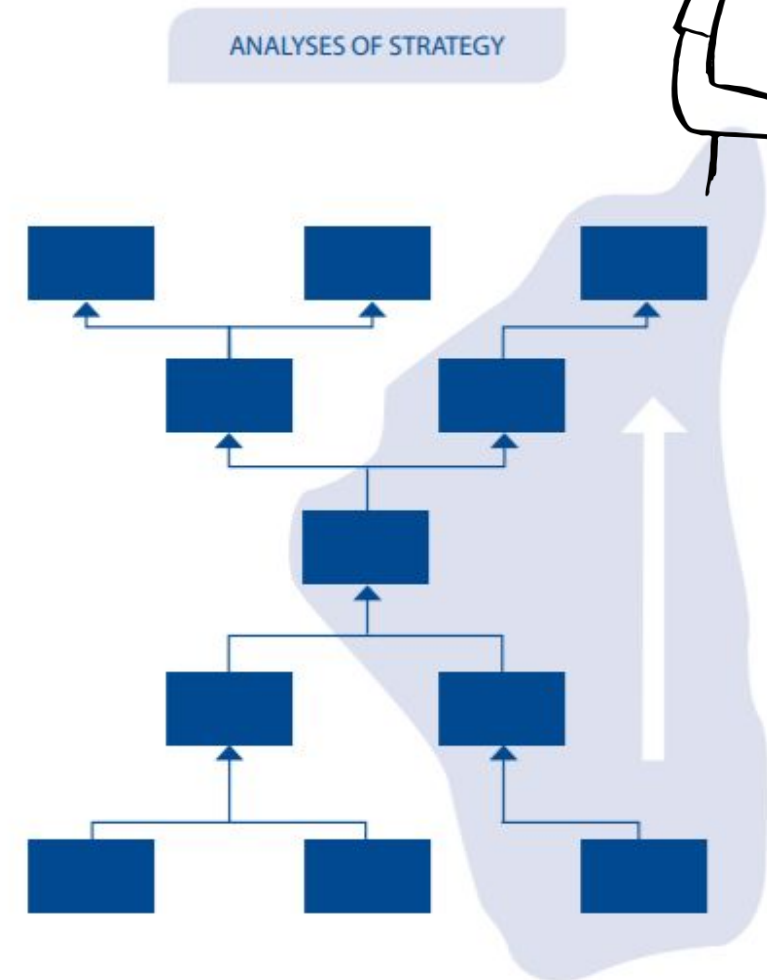
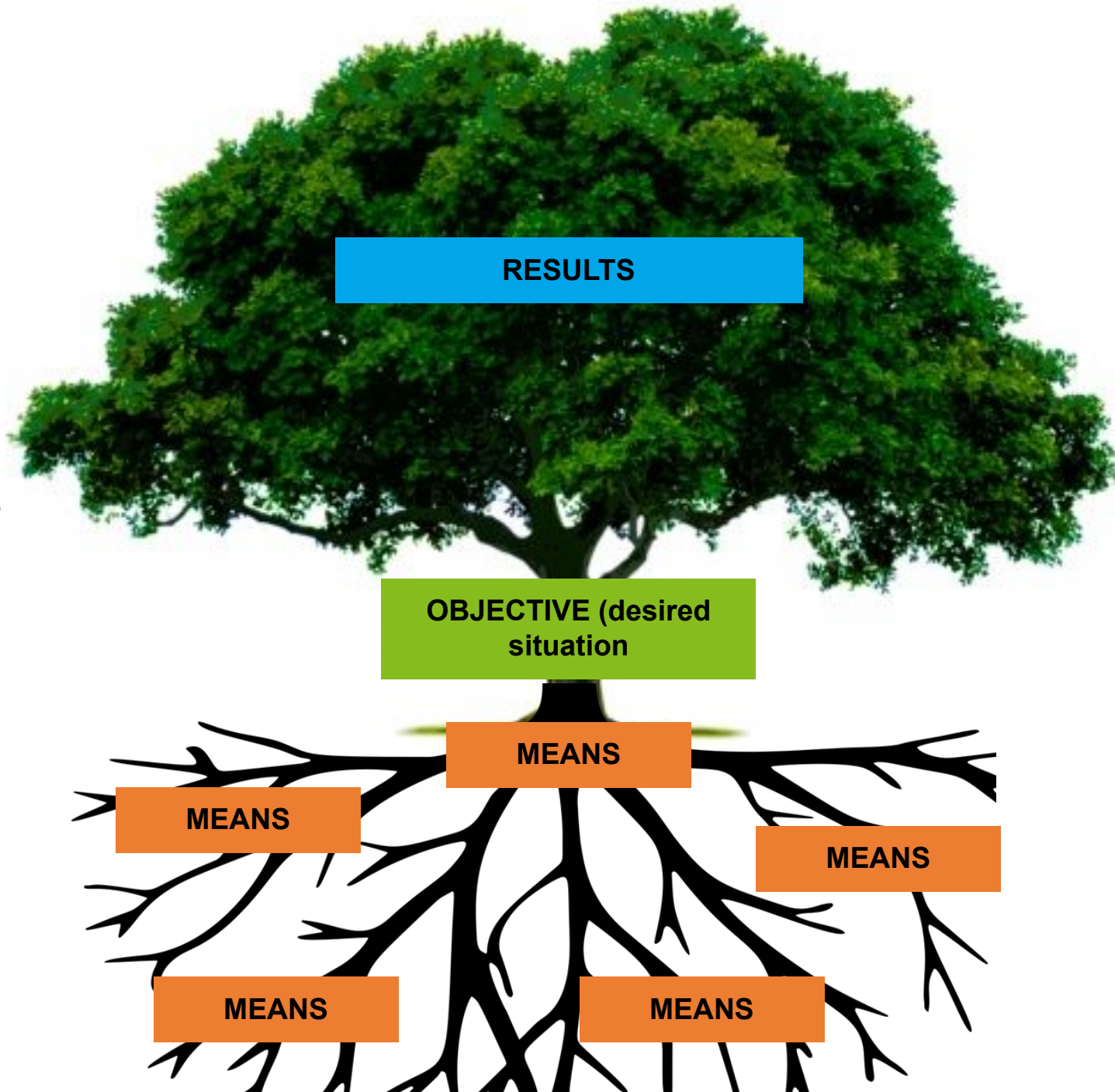


Figure 9. Figure. Problem tree strategy. Delevic, M. (2011)

OBJECTIVES TREE

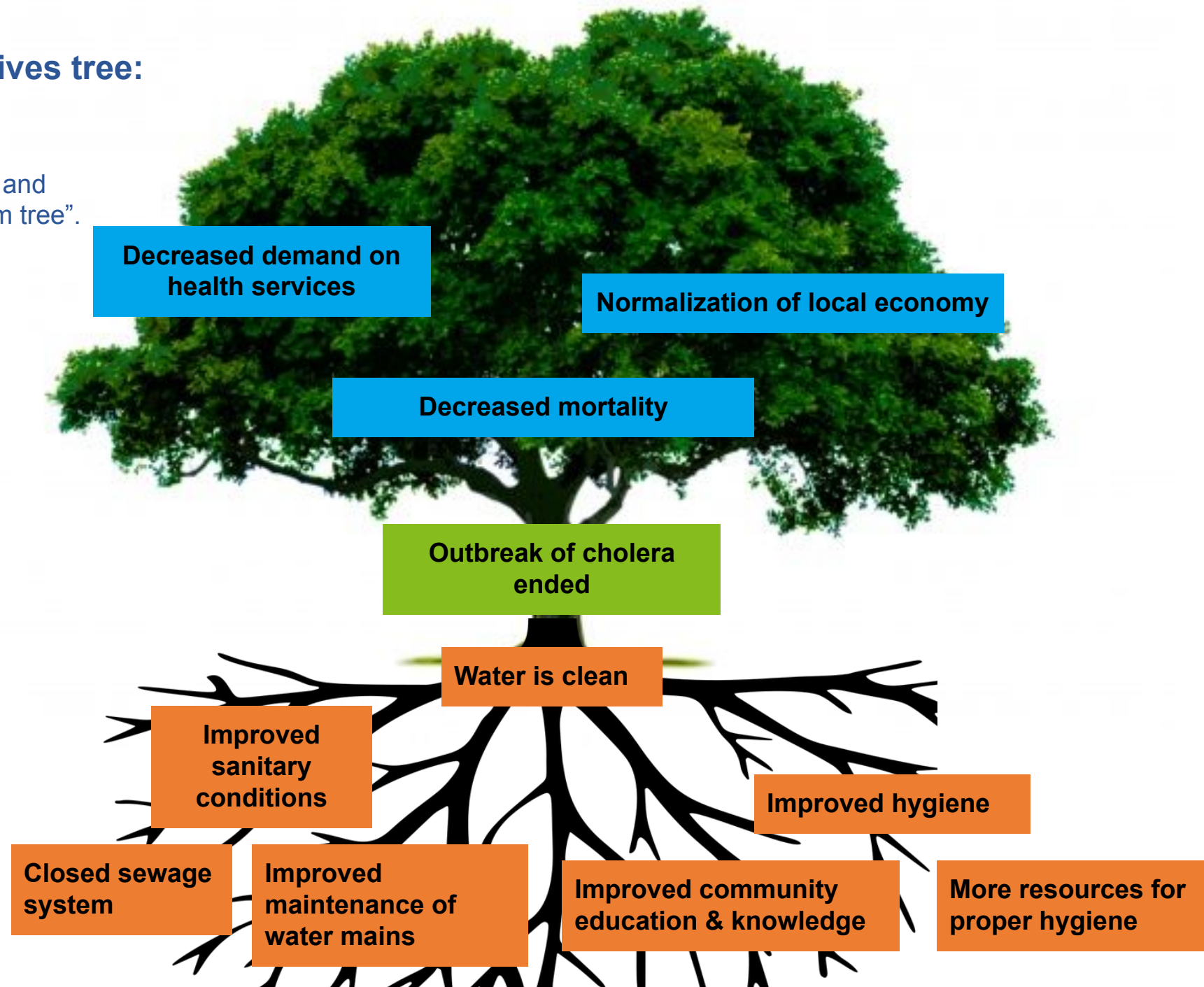
Positive and realistic reformulation of our problems.

The more precise we are with problems, the easier it is to turn them into objectives and later to formulate indicators.



Example of Objectives tree: Cholera outbreak

Based on the “Monitoring and Evaluation toolkit. Problem tree”.



Project planning terminology

WHY	a project is carried out	GOAL
WHAT	is the project expected to achieve	PURPOSE/OBJECTIVE
WHAT	will the project deliver	RESULTS/OUTPUTS
HOW	the project achieves results	ACTIVITIES
WHICH	external factors are essential for the success of this project	ASSUMPTIONS
HOW	can we assess the success of the project	INDICATORS
WHERE	will we find data to assess the success of the project	MEANS OF VERIFICATION
WHAT	will the project cost	RESOURCES

Figure 10. Project planning terminology.

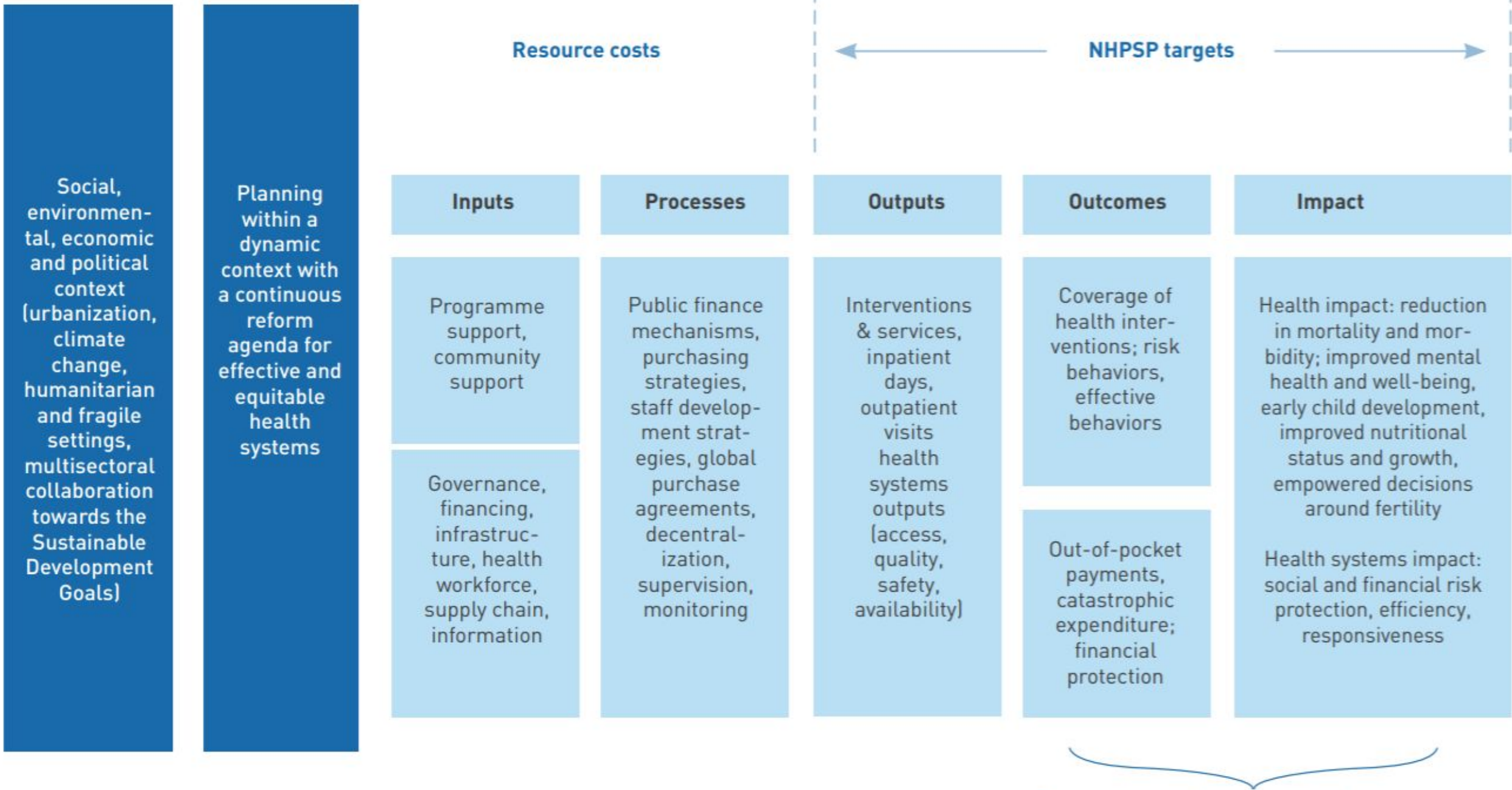


Figure 8. From inputs to outputs: a conceptual framework (Stenberg, K, et al., 2016)

Progress towards universal health coverage

SMART indicators

Specific

Measurable

Achievable

Relevant

Time-bound

Example of an indicator:

% community members with asthma

NB! Indicators should not specify a particular level of achievement. We shouldn't be using the words like 'improved', 'increased' or 'decreased' when setting indicators. *(Little, M)*

Goal # _____ <i>(write goal number or statement here)</i>	Objective Number					
Test Questions	1	2	3	4	5	6
1. Will attainment of the objective help the goal?						
2. Does the goal have at least one objective?						
3. Is the objective evidence-based (supported by data and theory)?						
4. Does the objective specify a starting (baseline) value or condition and a desired accomplishment (target value or condition)?						
5. Can progress toward achieving the objective be measured?						
6. Is the objective attainable and realistic, given the planning period and available resources?						
7. Does the objective specify a <i>realistic result</i> , rather than an <i>activity</i> ?						
8. Is a time frame specified for attainment of the objective or implied in the Plan, itself?						
9. Would someone unfamiliar with the planning group understand what the objective means?						
10. Have you indentified who will be accountable for achieving the objective?						

Budgeting

- By now you have already activities planned for your project
- The next step will be to budget those activities
- The budget is not only a measure for calculating costs
- Different ways to order a budget:

INVESTMENTS (CAPITAL COSTS)	DIRECT OPERATIONAL COSTS (RUNNING COSTS)	INDIRECT OPERATIONAL COSTS (OVERHEAD)
Equipment, facilities, vehicles, etc.	Costs that can be directly assigned to a specific project or program	Costs that cannot be directly assigned to a specific project but are shared among projects.

NB! Organize your budget into sections (time phases and/or topics)

(adopted from Peter Campbell)

Some examples of budgets

Objective	Item	Quantity	Frequency	Per unit cost	TOTAL	2.5% Contingency
Phase I						
Observers	Living expenses	5	12	USD 1,000.00	USD 60,000.00	USD 1,500.00
	Salary	5	12	USD -	USD -	USD -
	Travel cost	5	4	USD 1,000.00	USD 20,000.00	USD 500.00
	Survey (stationery)	5	1	USD 1,000.00	USD 5,000.00	USD 125.00
	???			USD 1,000.00	USD -	USD -
SUBTOTAL:				USD 85,000.00	USD 2,125.00	
Phase II						
Verification	Sample taking (needles, vials)	20000	2	USD 0.70	USD 28,000.00	USD 700.00
	Sample transport	1	4	USD 1,000.00	USD 4,000.00	USD 100.00
	MTA	1	1	USD 250.00	USD 250.00	USD 6.25
	Pan analysis	20000	2	USD 4.50	USD 180,000.00	USD 4,500.00
	Communications letter/week (DHL)	1	50	USD 50.00	USD 2,500.00	USD 62.50
	Storage cost	5	1	USD 5,000.00	USD 25,000.00	USD 625.00
SUBTOTAL:				USD 214,750.00	USD 5,368.75	
Phase III						
Strategy planning	Analysis staffing	10		USD -	USD -	USD -
					USD -	USD -
SUBTOTAL:				USD -	USD -	
Phase IV						
Capacity building	Training (lab level)	5	1	USD 2,000.00	USD 10,000.00	USD 250.00
	Training (interlab)	1	1	USD 12,000.00	USD 12,000.00	USD 300.00
	Training (medical staff level)	5	1	USD 2,000.00	USD 10,000.00	USD 250.00
	Training (medical staff-lab)	5	1	USD 4,000.00	USD 20,000.00	USD 500.00
	Surveys (paper)	5	1	USD 1,000.00	USD 5,000.00	USD 125.00
	Implementing staff	2	5	USD 800.00	USD 8,000.00	USD 200.00
	Travel cost (implementing staff)	2	1	USD 1,000.00	USD 2,000.00	USD 50.00
	Living cost	2	5	USD 250.00	USD 2,500.00	USD 62.50
SUBTOTAL:				USD 67,000.00	USD 1,425.00	
Overhead						
	Banking finances, currency transfer fees, admin			5% total budget	USD 20,000.00	USD 500.00
SUBTOTAL:					USD 20,000.00	USD 500.00

TASK	COST ITEMS	QUANTITY	COST PER UNIT (€)	FREQUENCY	TOTAL COST (€)
	Decoration + printed materials	1	76	1	76
	Sound	1	152	1	152
Focus group discussions at target sites (MDCs)	Team transport to MDCs	8	3	4	96
Everyday work observation of staff	Team transport to MDCs	8	3	2	48
	Lunch for team members	8	4	3	96
Training material compilation	Room rent for meeting	1	30	3	90
	Food	10	7	3	210
	Printing posters (A3)	3	4	6	72
Phase 2 Implementation (incl. Process evaluation)					
Staff training at 6 MDCs	Project team transport to MDCs	8	2	6	96
	Stationery (paper, pens)	20	1	6	120
	Oral health activity sheets	300	3	1	900
	Toothbrushes	500	2	1	1000
	Fluoride toothpaste	500	2	1	1000
	Lunch for project staff and trainees	28	4	6	672
Post-training staff monitoring to support implementation	Project team transport to MDCs	8	2	12	192
	Lunch for project team members	8	4	6	192
Caregiver training sessions	Project team transport to MDCs	13	2	16	416
	Healthy snacks (e.g. fruit)	13	30	1	390
	Information leaflet about oral health	50	1	13	650
Project team mid-term feedback workshop	Room rent for project team meetings	1	30	2	60
	Food	10	7	4	280
Phase 3 Summative evaluation					
FGD with MDC staff + observation	Team transport to MDCs	7	2	4	56
Feedback session with dental students and professors	Online calls (internet)	5	4	2	40
				SUBTOTAL:	14109
				5% contingency	705,45
				TOTAL:	14814,45
				Of which covered by other funding & sponsorship:	2452
				TOTAL funding	12362,45

Some additional useful tools

Logical framework (logframe)

- Logframes originated from a planning approach used by the US military
- Logframes were later adopted by USAid in the 1960s for development projects
- Since then it has been adopted and adapted by a large number of development assistance agencies globally.
- By the end of the 1990s it had become the standard approach when applying for funding from various donor agencies including the EU Commission and others
- Nowadays it is widely used as a standard approach when applying for funds

Logframe analysis


The order of filling it in:

	Project summary	Indicators	Means of Verification	Risks/ Assumptions
Goals	1	10	11	9
Project purpose	2	12	13	8
Results	3	14	15	7
Activities	4	Means	Costs	6
				5 Preconditions

Figure 11. The order of filling in a logframe (WHO)

Logframe analysis: IF- THEN

	Project summary	Indicators	Means of Verification	Risks/ Assumptions
Goals				
Project purpose				
Results				
Activities		Means	Costs	
				Preconditions



IF activities are undertaken, THEN results can be produced

IF results are produced, THEN the purpose will be achieved

IF the purpose is achieved, THEN this should contribute to achieving the overall goals of the project.

Logframe analysis template

Project title		Programme name and number	
Project beneficiary		Contracting period expires:	Disbursement period expires:
		Budget total:	IPA budget:
Overall objective	Objectively verifiable indicators	Sources of verification	Assumptions
What is the overall objective that the project will contribute to?	What indicators are linked to over-all objective?	What are information sources for these indicators?	
Project purpose	Objectively verifiable indicators	Sources of verification	Assumptions
What is the purpose of project to be realised by the project?	Indicators showing the extent to which project purpose has been achieved?	What are information sources for these indicators?	Factors and conditions not under direct project control, but necessary to achieve the overall project objective?
Results	Objectively verifiable indicators	Sources of verification	Assumptions
What are concrete visible outcomes to contribute to realisation of project purpose? What changes and improvements will be achieved by the project?	What are the indicators showing whether expected outcomes have been achieved?	What are information sources for these indicators?	Factors and conditions not under direct project control, but necessary to achieve the overall project objective?
Activities	Means	Expenses	Assumptions
What activities are required and in what order in order to achieve the expected outcomes?	What funds are required for implementation of listed activities? (by type of PRAG contract)	What are the expenses for each of the contracts?	Factors and conditions not under direct project control, but necessary for results to be achieved as planned?
			Preconditions
			What pre-requisites must be fulfilled for project implementation to start?

Figure 12. Logframe template (Delevic, M. 2011)

National Health Planning Tools Search



NATIONAL HEALTH PLANNING TOOLS · SEARCH

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About this resource centre

This Resource Centre is an on-line repository of WHO tools designed to assist health authorities, at both national and sub-national level, in elaborating Health Policies, Strategies and Plans. It includes diagnostic tools for assessment, monitoring and evaluation, as well as tools to support priority setting, identifying effective strategies, costing scenarios, resource planning and budgeting, and programming and implementation.

SEARCH CRITERIA

By Health System Building Blocks

- Leadership and Governance
- Service Delivery
- Health System Financing
- Health Workforce
- Medical Products, Vaccines & Technologies
- Health Information

By Planning Cycle Stage

- Situation assessment
- Priority setting
- Identifying effective strategies
- Costing
- Resource planning and budgeting
- Programming and implementation
- Monitoring and evaluation

By Planning Process Attributes

- Situation analysis and programming
- Process
- Finance and auditing
- Implementation and management
- Results, monitoring and review

OneHealth tool

- The OneHealth Tool is a model to be used for supporting national strategic health planning in low- and middle-income countries.
- The tool facilitates an assessment of resource needs associated with key strategic activities and their associated costs, with a focus on integrated planning and strengthening health systems.
- The first official version of the OneHealth Tool was released in May 2012. Since then the tool has been applied in more than 30 countries to inform planning and costing.

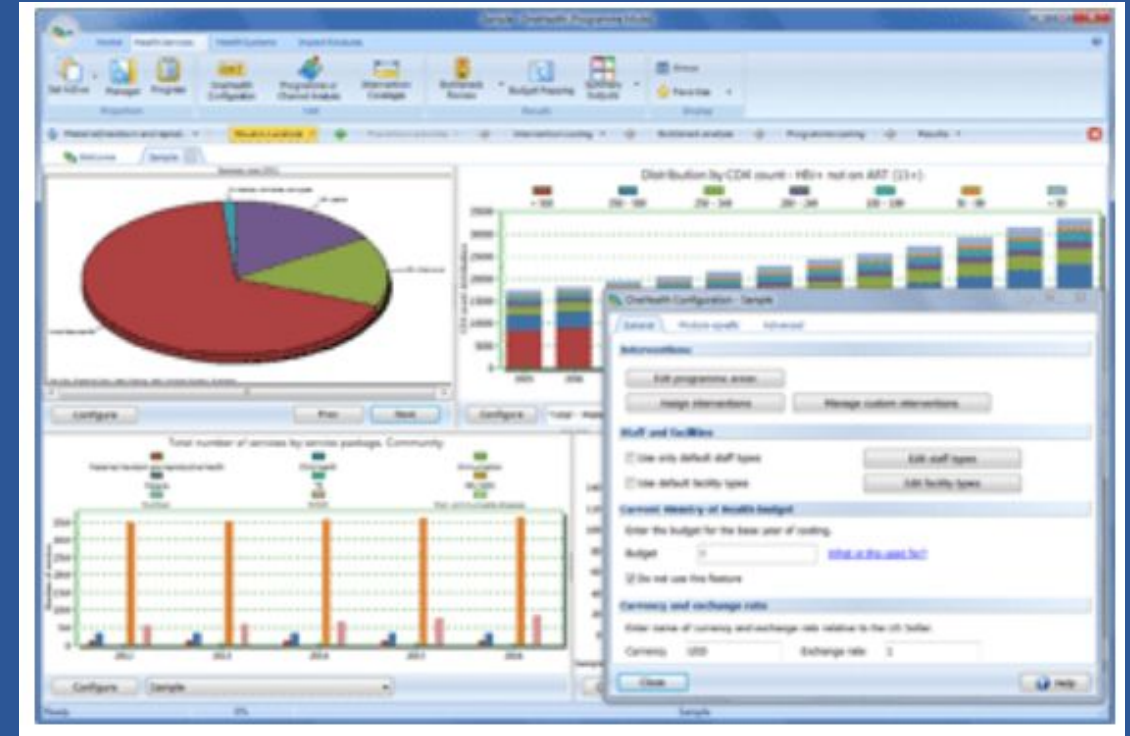


Figure 13. A snapshot of the OneHealth tool.

Final project guidance

Project plan of 2000 words (+/- 10%) and a PPT presentation (10 slides)

- Project Title: including your names, the date, and the title of this course
- Background: Explain the rationale behind your selected health topic and what it is about; include a brief overview of relevant literature including what has been done so far.
- Goal: what is the main thing you want the project to achieve?
- Activities: describe the types of activities you think could be done to address this issue
- Monitoring: list some elements that should be measured in the project
- Expected Staffing: make some guesses as to what type of staff/numbers of staff are needed for your project
- Total budget (in dollars)- a high-level budget sheet as a table in Excel is suitable, no need to get too detailed.



Final project guidance

Some useful exercises to do when working on your project:

- Prioritization exercise (incl. illustrative material- figure, graph, etc)
- Stakeholder mapping (incl. illustrative material- figure, graph, etc)
- Problem tree + Objectives tree (incl. illustrative material)
- Logframe analysis (Optional)

How to become a systems' thinker?

- Ask Different Questions
- Learn to Experience Time Differently
- Notice the Systems Around You



References:

World Health Organization. (2010). *Monitoring the building blocks of health systems: a handbook of indicators and their measurement strategies*. World Health Organization.

The Health Foundation. 2010. Evidence scan: Complex Adaptive Systems. Accessed from: <https://www.health.org.uk/sites/default/files/ComplexAdaptiveSystems.pdf>

"Everybody's business. Strengthening health systems to improve health outcomes : WHO's framework for action" (PDF). WHO. 2007.

De Savigny, D., & Adam, T. (Eds.). (2009). *Systems thinking for health systems strengthening*. World Health Organization.

Grantham, H. S., Bode, M., McDonald-Madden, E., Game, E. T., Knight, A. T., & Possingham, H. P. (2010). Effective conservation planning requires learning and adaptation. *Frontiers in Ecology and the Environment*, 8(8), 431-437.

Terwindt F, Rajan D., Soucat A. Chapter 4. Priority setting for national health policies, strategies and plans. In: Schmets G, Rajan D, Kadandale S, editors. *Strategizing national health in the 21st century: a handbook*. Geneva: World Health Organization; 2016.

Tromp, N., Baltussen, R. Mapping of multiple criteria for priority setting of health interventions: an aid for decision makers. *BMC Health Serv Res* 12, 454 (2012). <https://doi.org/10.1186/1472-6963-12-454>

Shuey D, Bigdeli M, Rajan D. Chapter 6. Operational planning: transforming plans into action. In: Schmets G, Rajan D, Kadandale S, editors. *Strategizing national health in the 21st century: a handbook*. Geneva: World Health Organization; 2016.

Stenberg K, Rajan D. Chapter 7. Estimating cost implications of a national health policy, strategy or plan. In: Schmets G, Rajan D, Kadandale S, editors. *Strategizing national health in the 21st century: a handbook*. Geneva: World Health Organization; 2016.

Blas E, Roebbel N, Rajan D, Valentine N. Chapter 12. Intersectoral planning for health and health equity. In: Schmets G, Rajan D, Kadandale S, editors. *Strategizing national health in the 21st century: a handbook*. Geneva: World Health Organization; 2016.

Wageningen University and Research. Problem Tree | Multi-Stakeholder Partnerships. Accessed November 22, 2021 from: <http://www.mspguide.org/tool/problem-tree>

The monitoring and evaluation toolkit. The Problem Tree. Accessed November 22, 2021 from <https://thetoolkit.me/approaches-tools/key-tools/the-problem-tree/>

Delevic, M. (2011). *Guide to the logical framework approach*. European-Integration-Office, editor. Belgrade: Republic of Serbia Government Printing: Global Print.

WHO. Transforming health priorities into projects. Logframe development. Accessed Nov 22, 2021 from <https://www.who.int/hac/techguidance/training/logframe%20development.pdf>

Little, M. Carnegie, T. Blog: How to create SMART indicators. Accessed Nov 22, 2021 from <https://www.firdaleconsulting.com/blog-post-2>