# Strategic Environmental Assessment (SEA)
# Training course for Thailand

# Basic Concepts of SEA and its evolution

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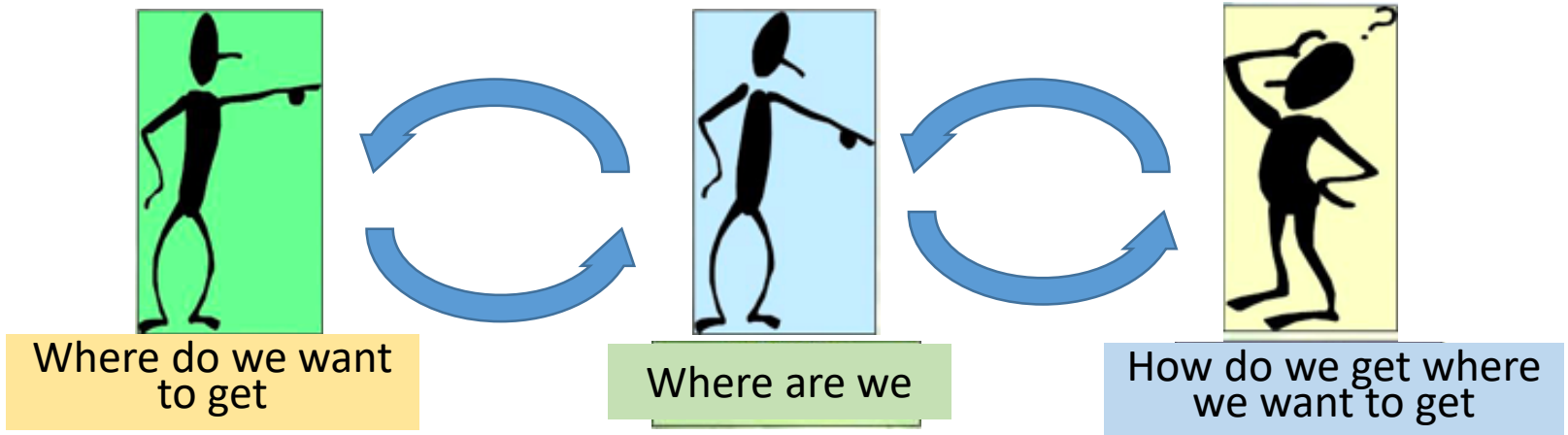
# What is SEA

# Strategic Environmental Assessment (SEA)

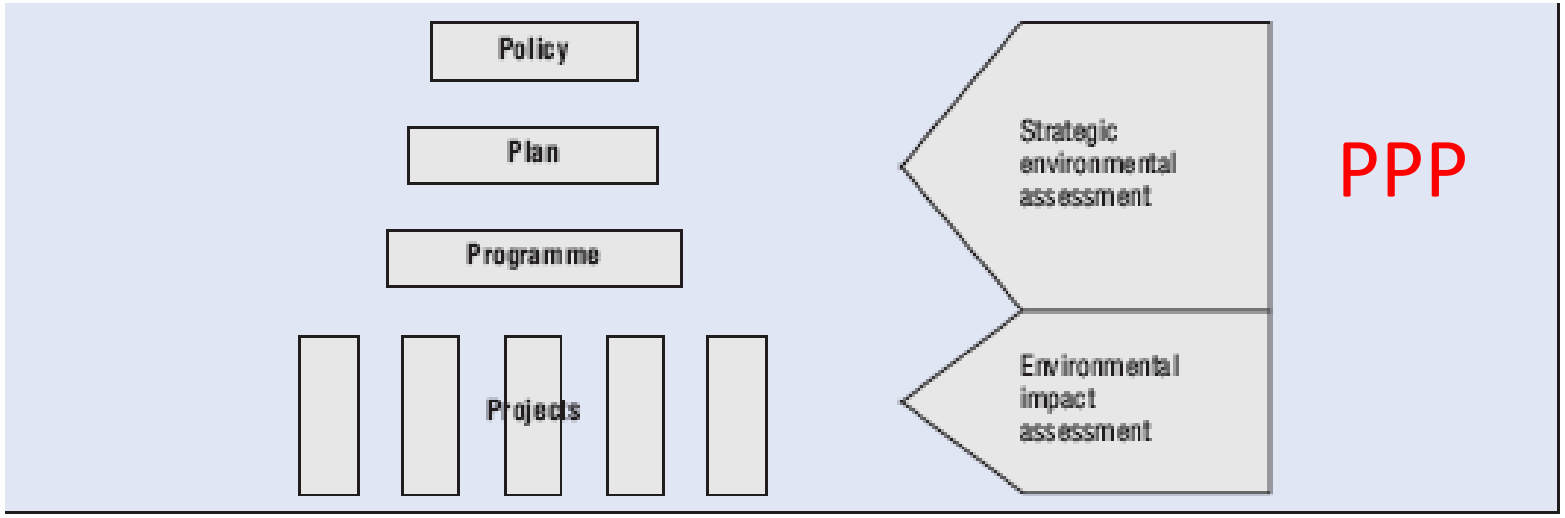
A strategic decision support instrument about how to get where we want to get with the best results for the environment and for sustainability

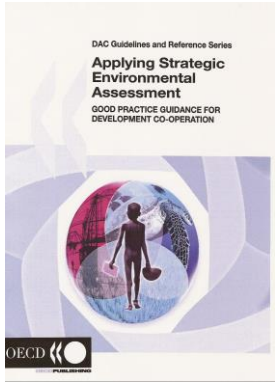


# Strategic Environmental Assessment (SEA)

## Most common understanding: traditional SEA

Roots on Environmental Impact Assessment (EIA)




OECD-DAC, 2006

## Traditional SEA or EIA-based SEA

# …at least 106 definitions of SEA

(Silva, Selig, Lerípio and Viegas, 2014)

"Strategic environmental assessment (SEA) is the term used to describe the **environmental assessment** process for **policies, plans and programmes** which are approved **earlier than the authorisation of individual projects**" (Lee and Walsh, 1992, p.126).

"**Environmental impact assessment** for policies, plans, and programs – also known as strategic environmental assessment (SEA) – (...)" (Therivel, 1998, p.39).

"The term "Strategic Environmental Assessment" (…) refers to a process that **integrates sustainability** considerations into the **formulation, assessment and implementation of policies, plans and programme** (PPPs)" (DEAT, 2007, p.1).

## Concept of PPP…and P

| | |
|---|---|
| Policy | Road-map with defined objectives, set priorities, rules and mechanisms to implement the objectives |
| Planning | Priorities, options and measures for resource allocation according to resource suitability and availability, following relevant sectoral and global policies |
| Programme | Organized agenda with specification of activities and programmes investments, in the framework of relevant policies and plans |
| Project | Detailed proposal, scheme or design of any development action or activity, involves construction works and implements policy/ planning objectives |

# International systems on SEA

Effects
Impacts
EIA-type

Sustainability
Capacity
Strategy



**SEA - From "big EIA" to strategic thinking**

What works better depends on purpose and context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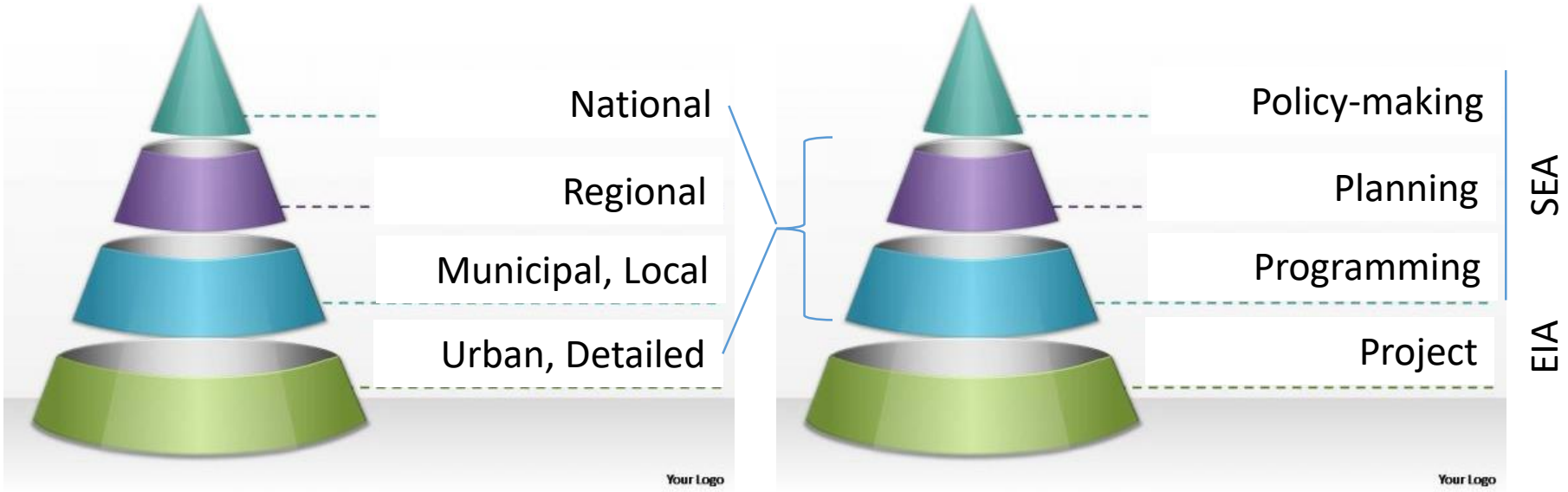
# What do I want SEA for?


Permission to proceed?


How to get to where we want to go?

# Common hierarchy of PPP and P

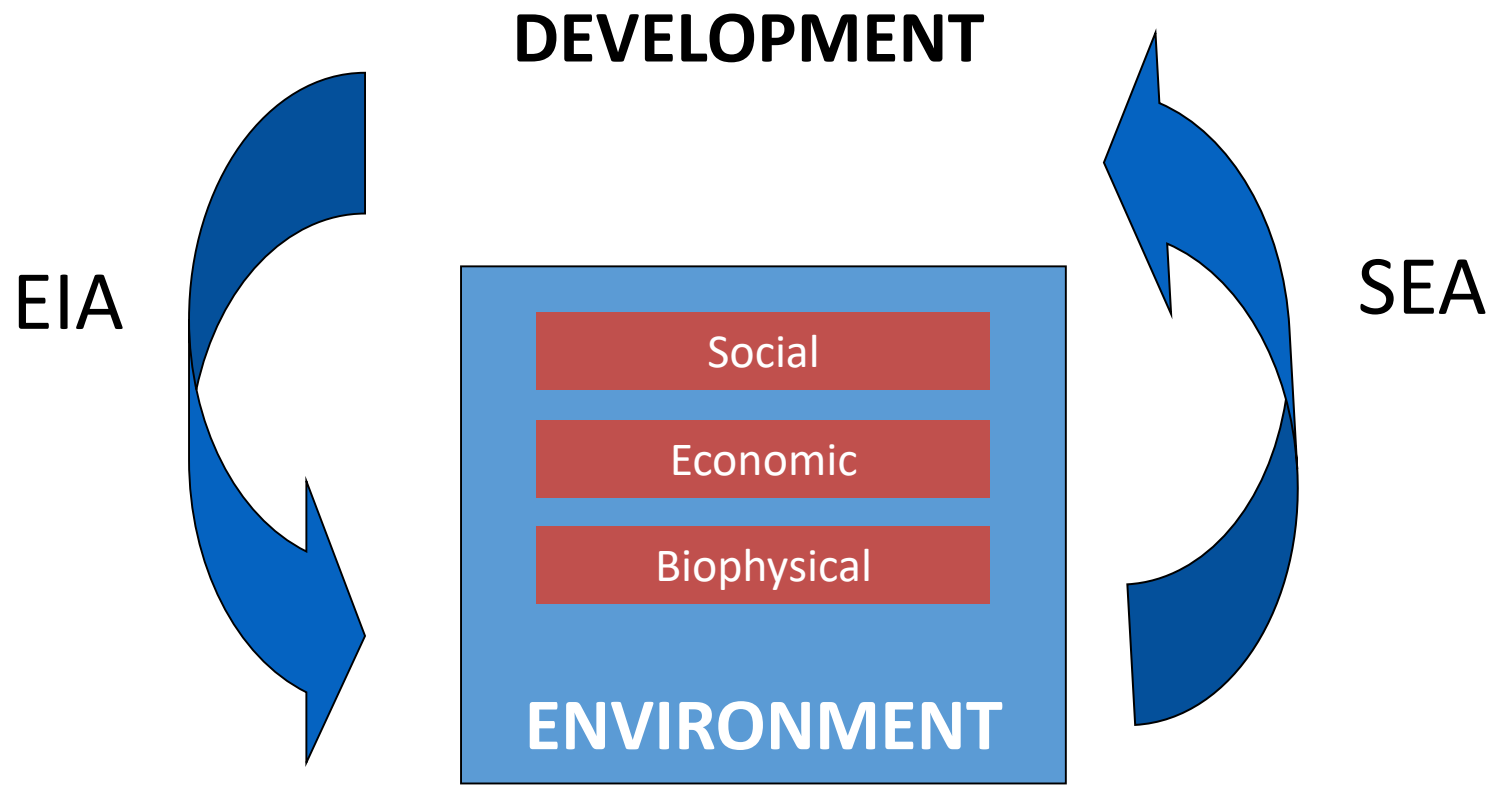



- **operational** plans and programmes – aimed at setting actions (action or site-driven)

- **forward-looking (strategic) policies,** plans and programmes – aimed at setting directions (broader direction and long term-driven)

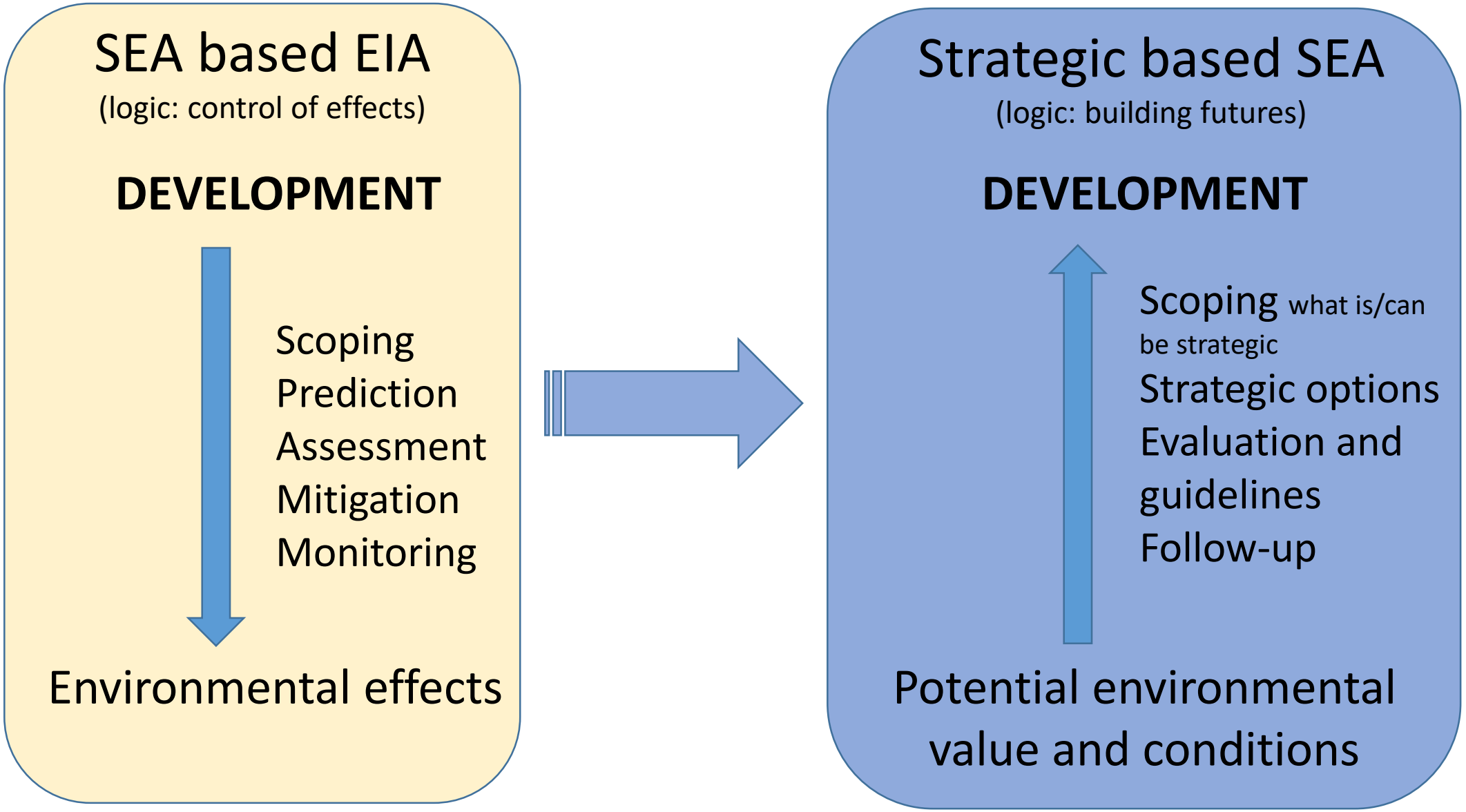
Partidário, 2014

# SEA can create contexts for development (Partidário, 2007, 2012)




Source: CSIR, 1996, 2007

# Proposal for SEA using Strategic Thinking



# Key questions for distinguishing a strategic thinking (ST) from and impact (EIA-based) thinking

## **ST SEA** = GOOD STRATEGY

What are your objectives?

What are key drivers?

What are your strategic options?

What are key restrictions?

What are major interests?

What are the most important policies to be met?

## **EIA** = GOOD DESIGN

What are the main characteristics of the PP?

Where is it located?

What are PP alternatives?

What are its main physical, social, economic effects?

What are its major effects/impacts?

What are the mitigation measures?

# SEA evolution
# SEA schools of thought

# What the literature says on what is SEA

Is SEA an instrument to **safeguard** environmental concerns in decision-making? or Is it intended to **foster sustainability**, or to support balanced decision-making with respect to all normative views and interests concerned? (Thissen 2001: 40)

For the environmental assessment of higher level PPP, attempts to apply project-level EIA methodologies have generally proven inadequate. (Nilsson and Dalkmann, 2001)

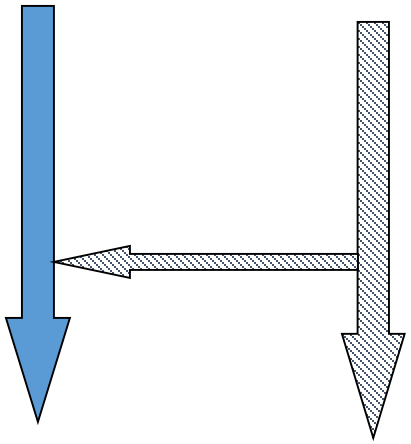
SEA still practiced as a largely "EIA-based" tool (Verheem and Dusik, 2011)

SEA is an instrument for change towards more sustainable patterns of behaviour and development (Partidário, 2012)

# Models of SEA

## 1. One opportunity model

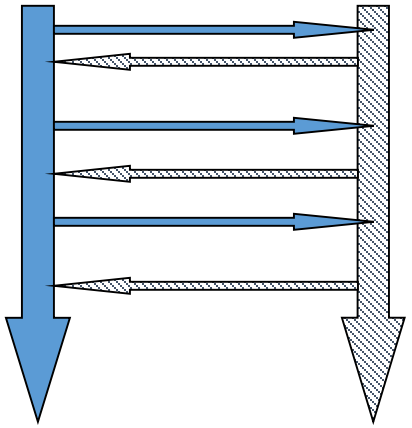
Decision Process SEA Process



too late

## 2. Parallel model

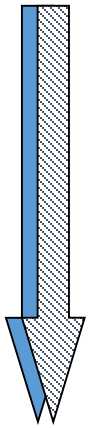
Decision Process SEA Process



one size fits all

## 3. Integrated model

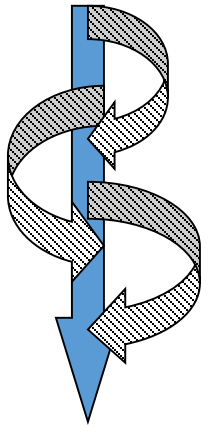
Decision Process + SEA Process



what does what?

## 4. Decision-centred model

Decision Process

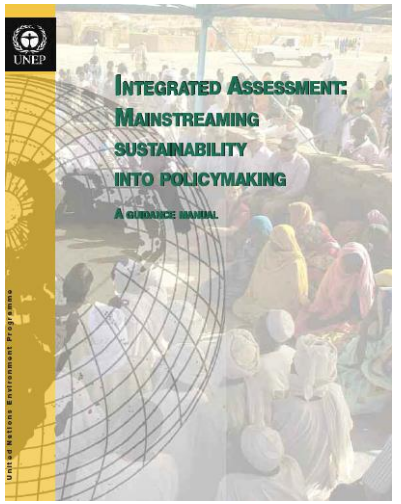


SEA - framework of key activities

taylor-made

(Partidário, 2007)

# SEA spectrum (UNEP, 2009)




Issues

EIA-based ⟷ Sustainability assessment

OECD-DAC, 2006

Governance

Impact-based ⟷ Institutional-based

World Bank, 2008

Approach

Effects-based ⟷ Strategic-based

Partidário, 2007

# SEA schools of thought

## 1. The politics of SEA – what do you want from SEA?

"Politics is the process by which the society chooses the rules that will govern it" Acemoglu and Robinson, 2012


Decide on stop or go ahead?
Permission to proceed


Facilitate development?

(Partidário, 2009)

# 2 The politics of SEA


Permission to proceed?

Changing names does not change the philosophy

(Partidário, 2009)

# 2 The politics of SEA

SEA still practiced as a largely "EIA-based" tool (Verheem and Dusik, 2011)


Permission to proceed?

As long as SEA continue to mimic the basic features of EIA procedure, it becomes little more than an EIA that looks at a somewhat bigger picture which a well-implemented EIA should do anyway (Nilsson & Dalkmann, 2001)

# Basic concepts

# Basic foundation concepts

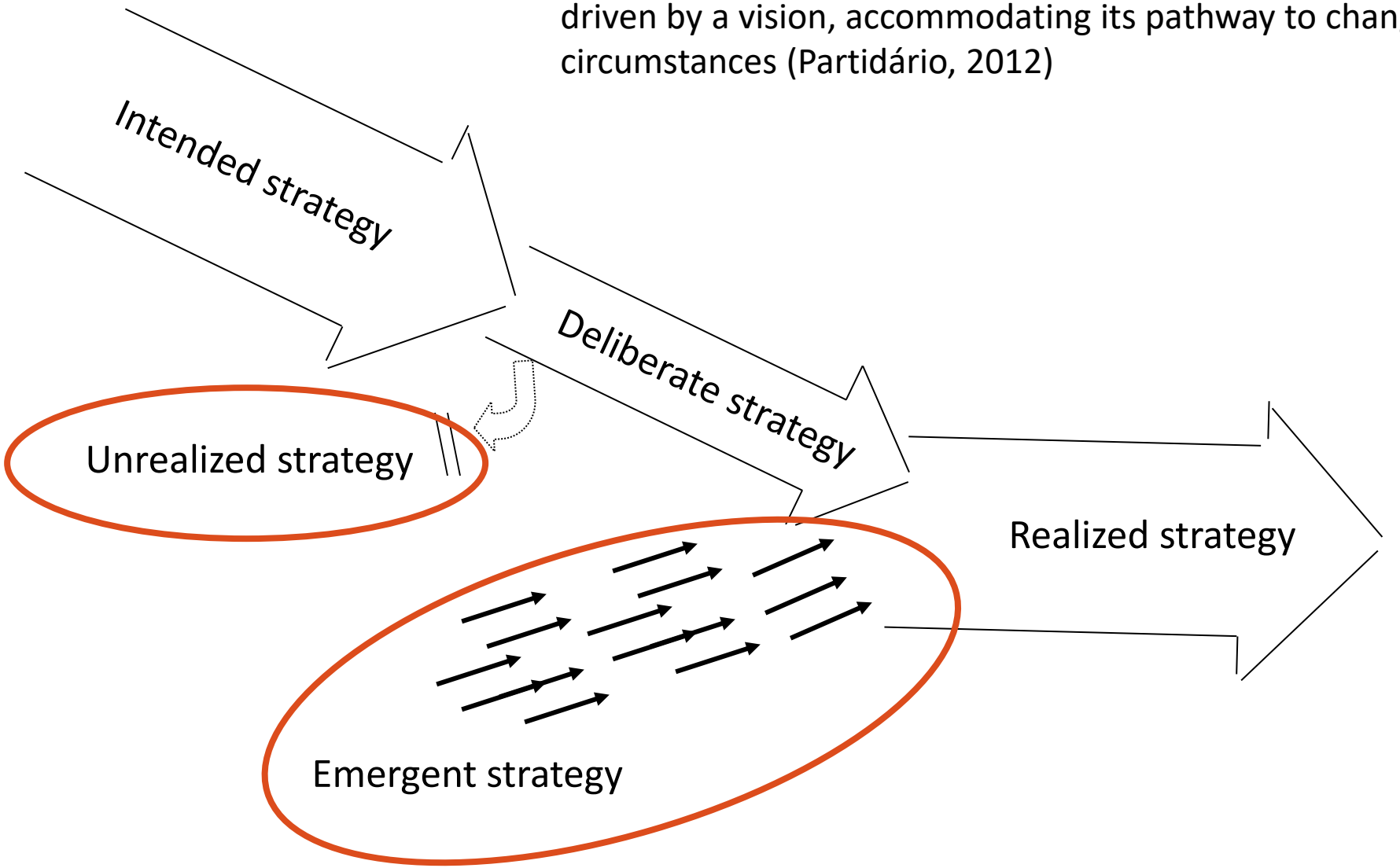
- Strategy
- Strategic thinking
- Systems thinking
- Sustainability
- Strategic issues
- Proactive vs reactive (in relation to a decision, or a problem)
- Integration of processes and substances
- Driving forces

# Concept of Strategy

Strategy - Intended means that aim to achieve long-term objectives driven by a vision, accommodating pathway to changing circumstances (Partidário, 2012).

Strategic approaches in policy and planning, according to Mintzberg (1994), **are not intended to find out what can happen in the future but aim to plan and steer actions that make up possible routes to a desirable future**.

- **Strategy** - Intended means that aim to achieve long-term objectives driven by a vision, accommodating its pathway to changing circumstances (Partidário, 2012)




# Forms of strategy

Based on Mintzberg, 1994

# Strategic thinking

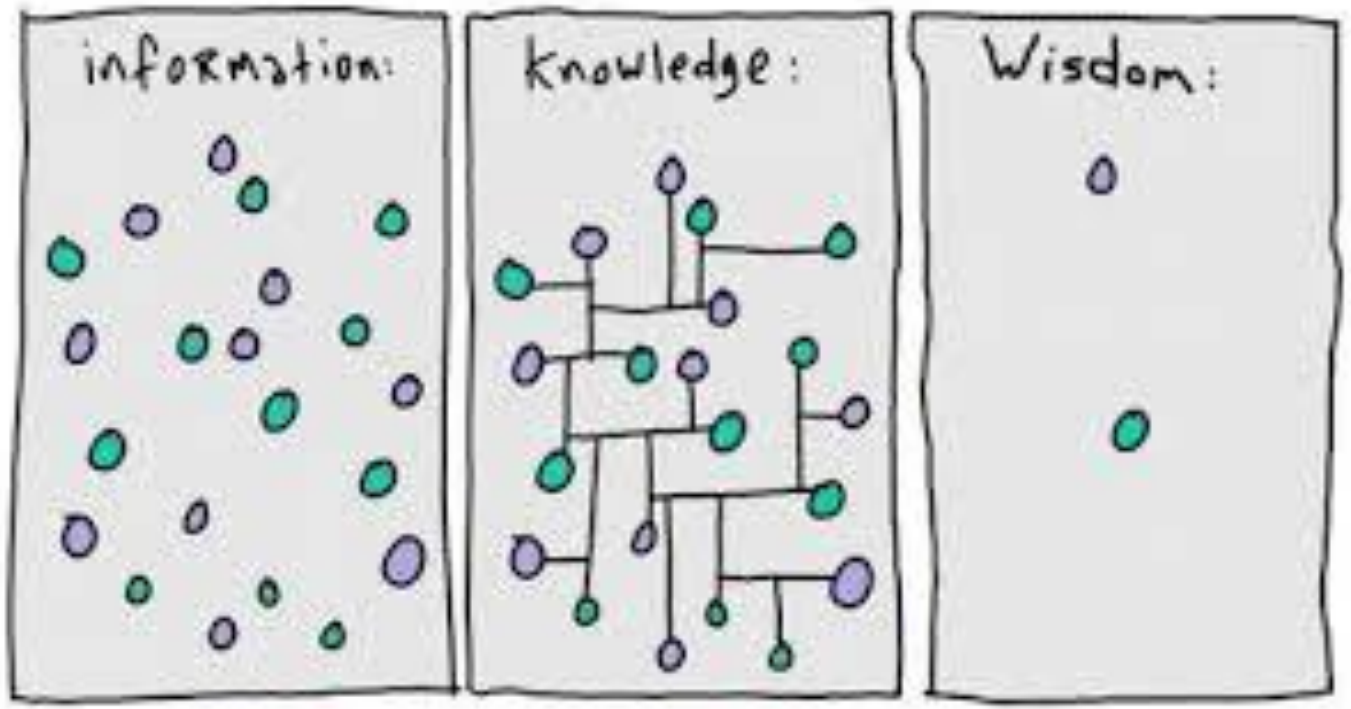
Long term
Wide perspectives
Complexity thinking
Thinking in systems

Change mental models

Integrate environment in the formation of strategies and assist the formulation of pathways for sustainability, rather than looking at the effects of policies, plans and programmes (Partidário, 2007)

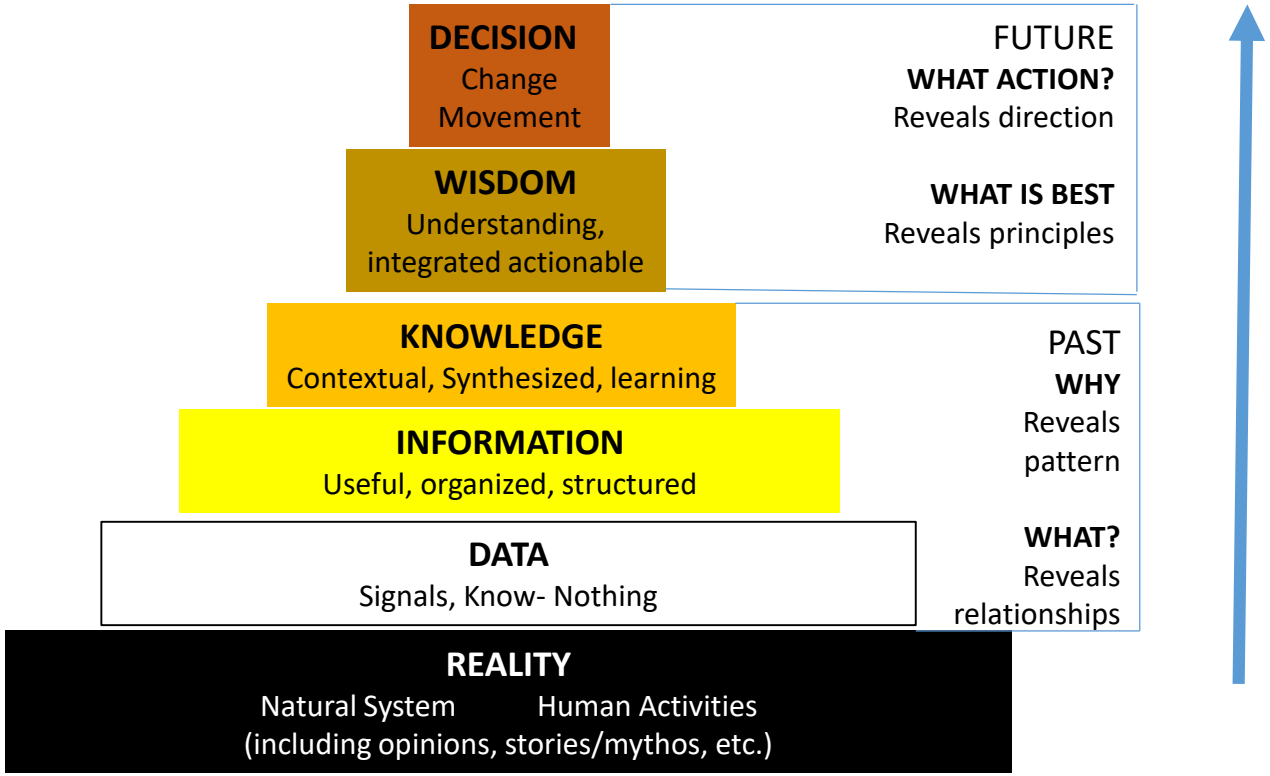
# System thinking

Russel Ackhoff wisdom theory, 1989


A system is not a sum of the behavior of its parts, it’s the product of their interactions.

# Pyramid from Data to Decision

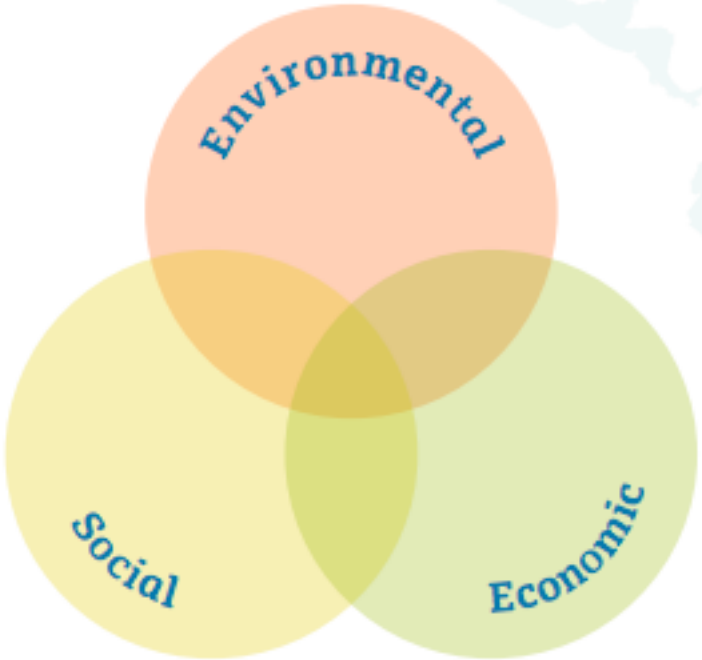



A wealth of *information* creates a poverty of attention (Herbert Simon)

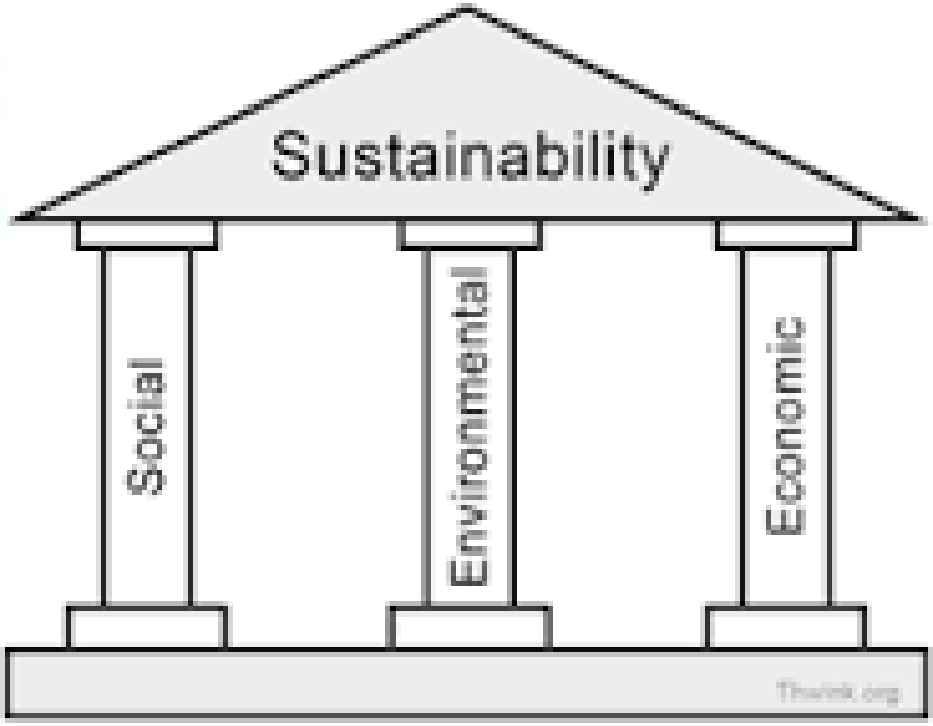
# Sustainable Development

# Sustainability

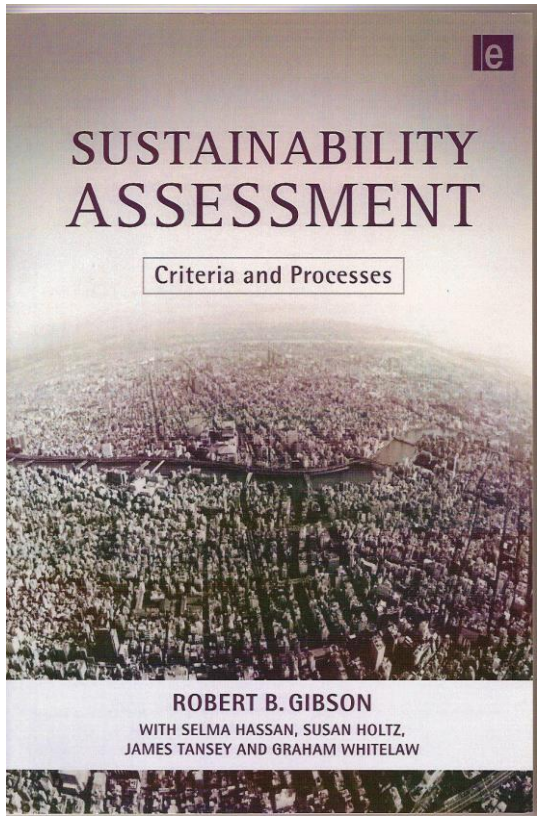
(Gibson et al, 2005) - is essentially an integrated concept that result from the intersection of ecological, social and economic interests and initiatives







# Gibson's sustainability criteria, 2005




1. Socio-ecological system integrity
2. Livelihood sufficiency and opportunity
3. Intragenerational equity
4. Intergenerational equity
5. Resources maintenance and efficiency
6. Socio-ecological civility and democratic governance
7. Precaution and adaptation
8. Immediate and long-term integration

# Strategic issues (Partidário 2012)

Policy choices or critical challenges that must be addressed to achieve a vision – requires positioning in the future, rather than simply reacting to problems

Criteria do define strategic issues:

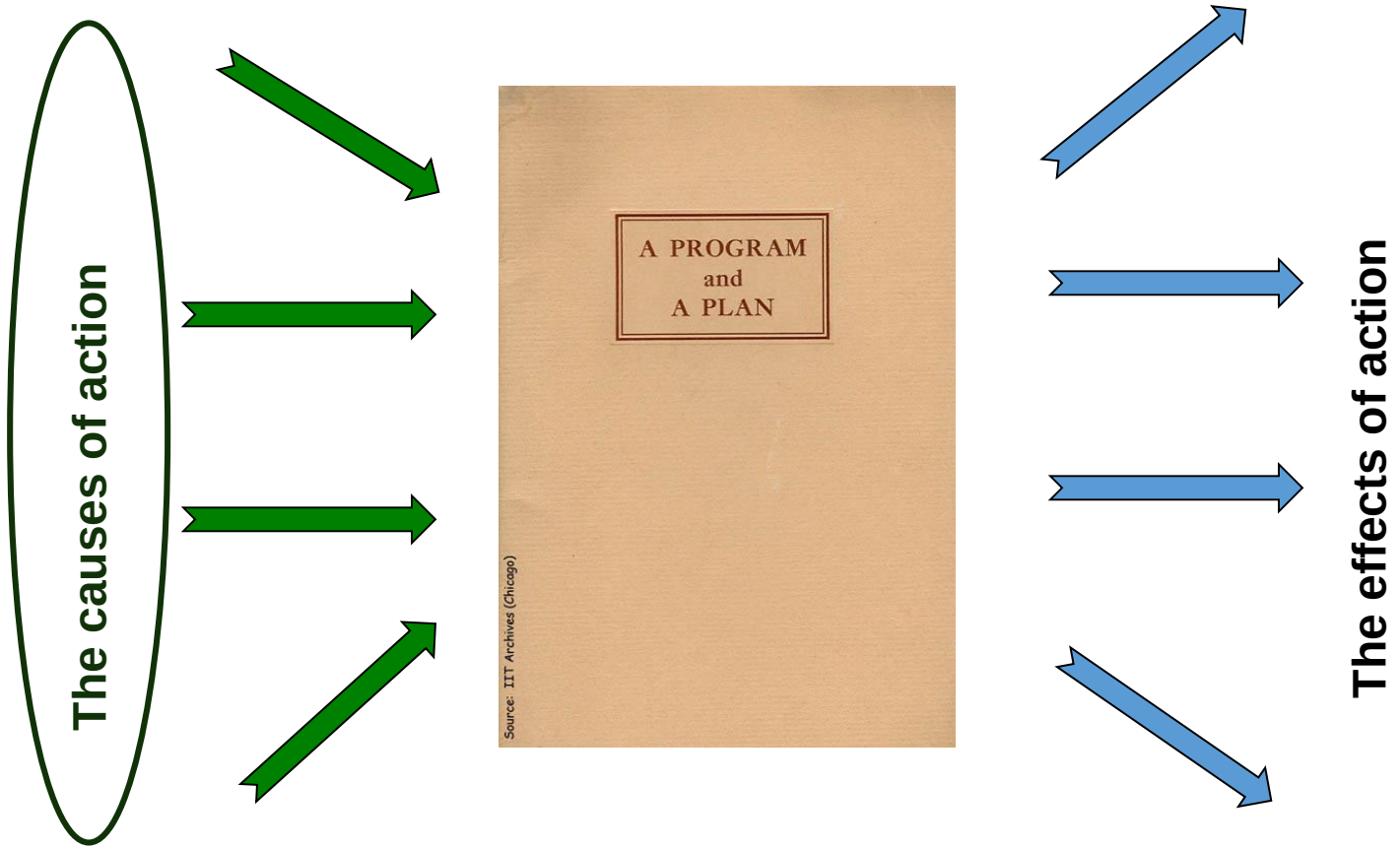
- Relates to long-term objective
- Is a priority issue
- Covers broad range of issues

# Kendeng story

Cement factory in Pati to use limestone
Carsic zone
Agriculture and forest potential
Farmers
Local revenue from mining sector increase

Think long-term….
What are strategic issues?

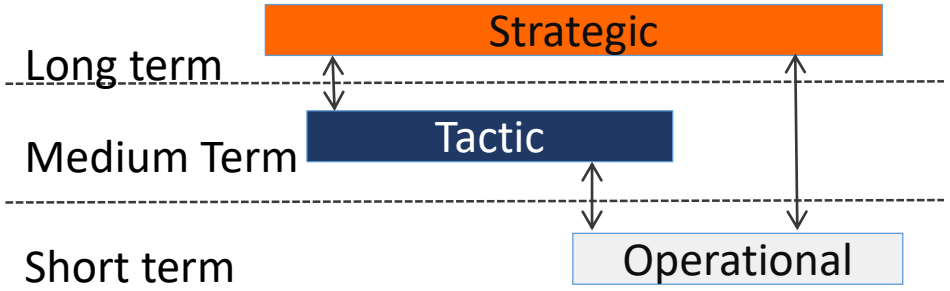
# Proactive versus reactive



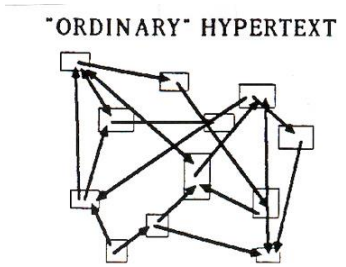

(Partidário, 2007)

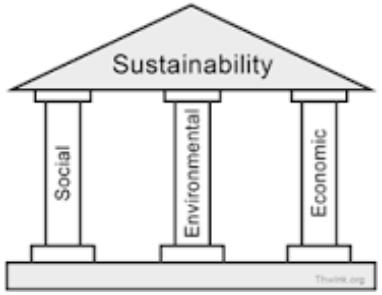
# Other basic contrasting concepts (Partidário, 2012)

- **Strategic vs operational**



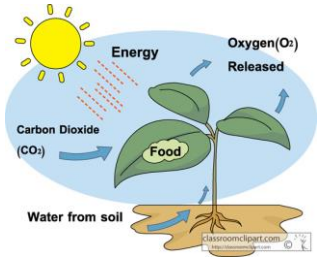

- **Systems thinking vs silo thinking**



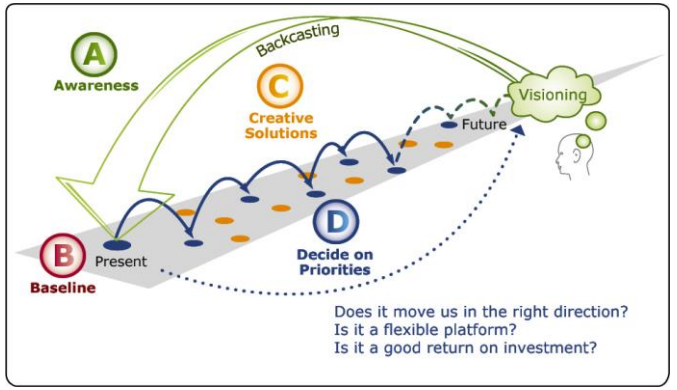




- **Complexity vs complicate**

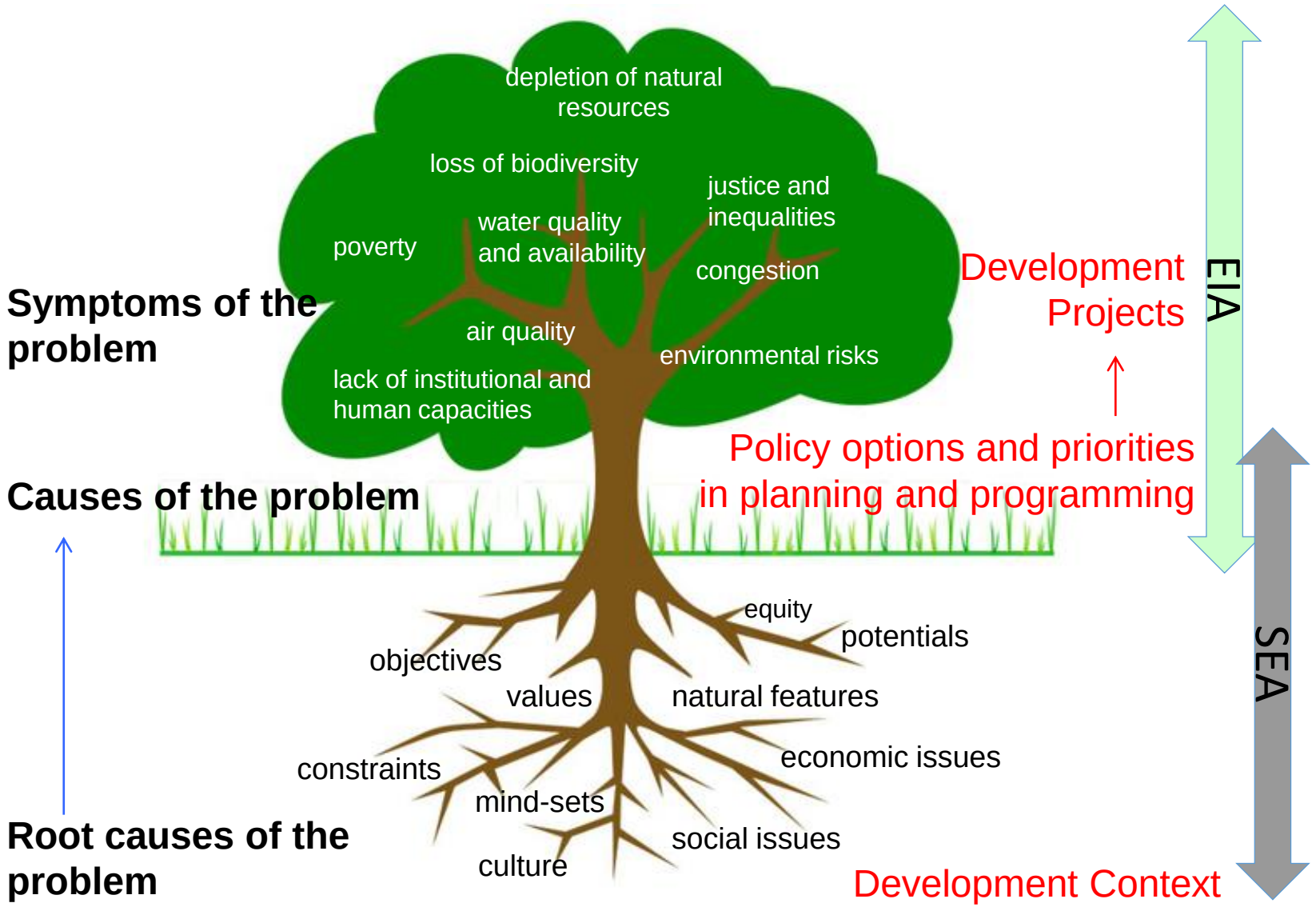
simple complicated complex


- **Forward-looking vs problem solution**

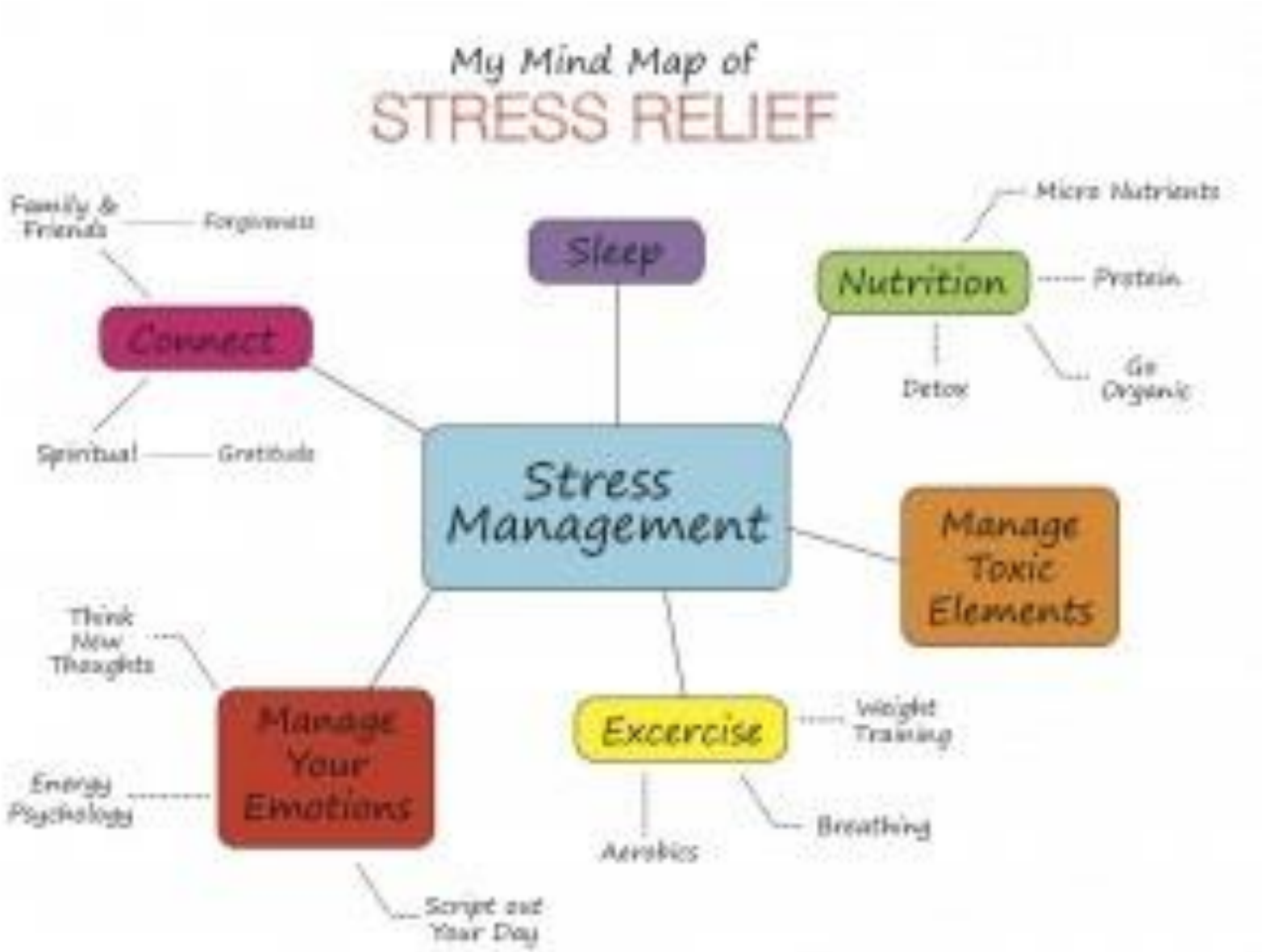



# Problem tree

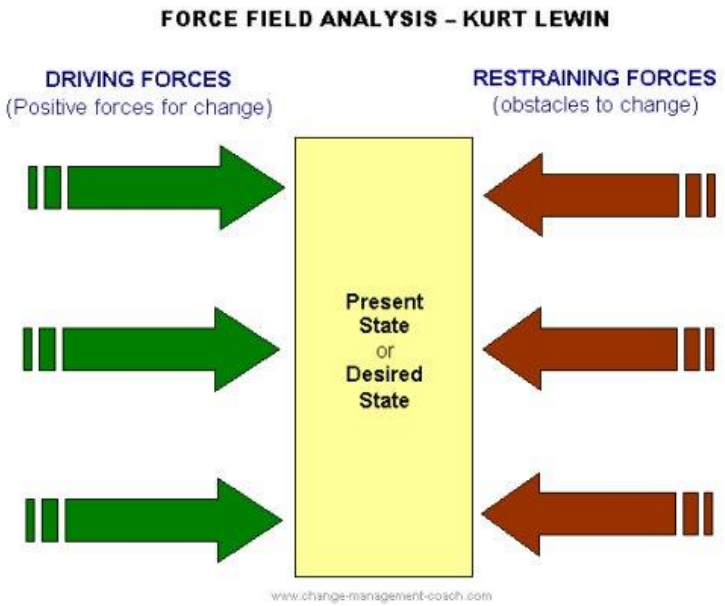



(Partidário, 2012)

# Example of mind-mapping



# Driving forces - megatrends




# Kendeng story

Cement factory in Pati to use limestone
Carsic zone
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Farmers
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# Illustrate the case using problem tree/mind-mapping