

Strategic Environmental Assessment (SEA) Training course for Thailand

Strategic thinking for sustainability (ST4S) in SEA

Maria Rosário Partidário

Professor

Universidade de Lisboa / Aalborg University

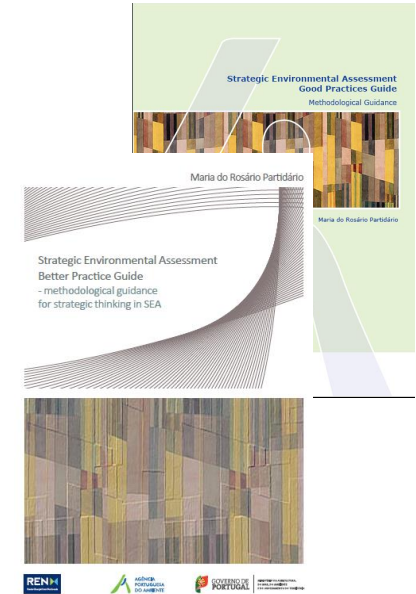
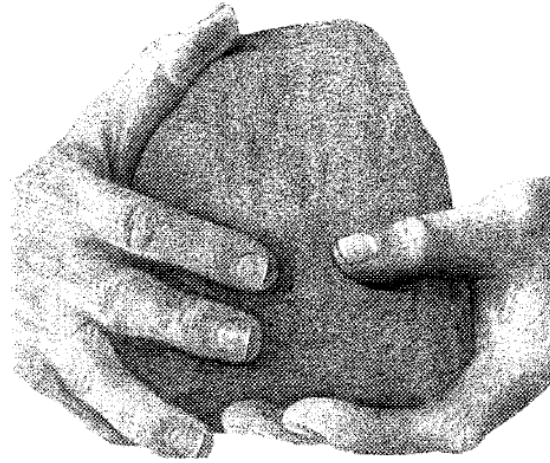
mariapartidario@tecnico.ulisboa.pt

Method

Strategic thinking model for sustainability (ST4S) -
Critical Decision Factors approach

Framework for Strategic Thinking for Sustainability (ST4S)

(Partidário 2007, 2012)



To help create contexts for sustainable development

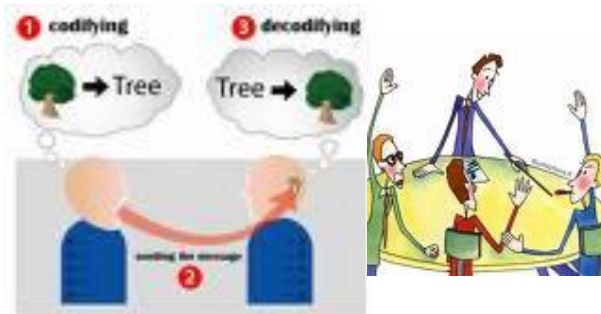
Through SEA or through other strategic approaches to sustainability



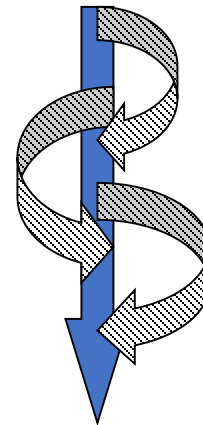
Strategic-thinking model for sustainability (ST4S)

Always combine three components

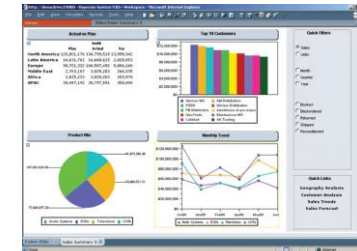
Communication and
Engagement - governance



Process



Technical
analysis



Strategic-thinking Methodology for SEA – Three functions

Three functions make the strategic thinking SEA:

- Integration – at least 60% of effort
- Assessment – 25-30 % of effort
- Validation – 10-15% of effort

If the SEA succeeds in assuring good integration, assessment will be easier and validation only a formality, to sign off

(Partidário, 2007, 2012)



Strategic-thinking model for sustainability (ST4S)

Three distinguishing features

1. **Critical decision factors** – the pinpoints in the assessment framework
2. **Pathways for sustainability** – options assessment (risks and opportunities)
3. **Continuing dialogues** between processes and people (actors networks), throughout decision cycles

Strategic-thinking SEA terminology

| <i>In traditional EIA terminology:</i> | <i>In strategic model in SEA:</i> | <i>Why the new term</i> |
|--|-----------------------------------|--|
| Scoping | Critical decision factors | Ensure a strong focus on decision issues rather than on a vague environmental broadband |
| Planning phases | Decision windows | The key moments for SEA action rather than normative stages |
| Baseline | Context and Trends | More dynamic analysis rather than characterizing current state |
| Alternatives | Strategic Options | Optional strategic pathways to meet objectives rather than an either...or operational selection |
| Impacts | Opportunities and risks | More dynamic assessment, admits trade-offs and choices rather than unavoidable and mitigable effects |
| Mitigation measures | Guidelines (planning, management) | Assumes future change and improvement rather than reduction of harm |

(Partidário, 2007, 2012)

Strategic-thinking model for sustainability (ST4S)

Creating sustainable development contexts

The essence of the strategic thinking methodology for SEA

FOCUS

Priorities in a broad integrated sustainability context

Critical Decision Factors

ASSESS PATHWAYS FOR SUSTAINABILITY

What may be risks and opportunities of strategic options

Issue guidelines and recommendations

Continuous dialogues: process links, engagement, follow-up

Cyclical re-assessment as the context change and learning takes place with development unfolding



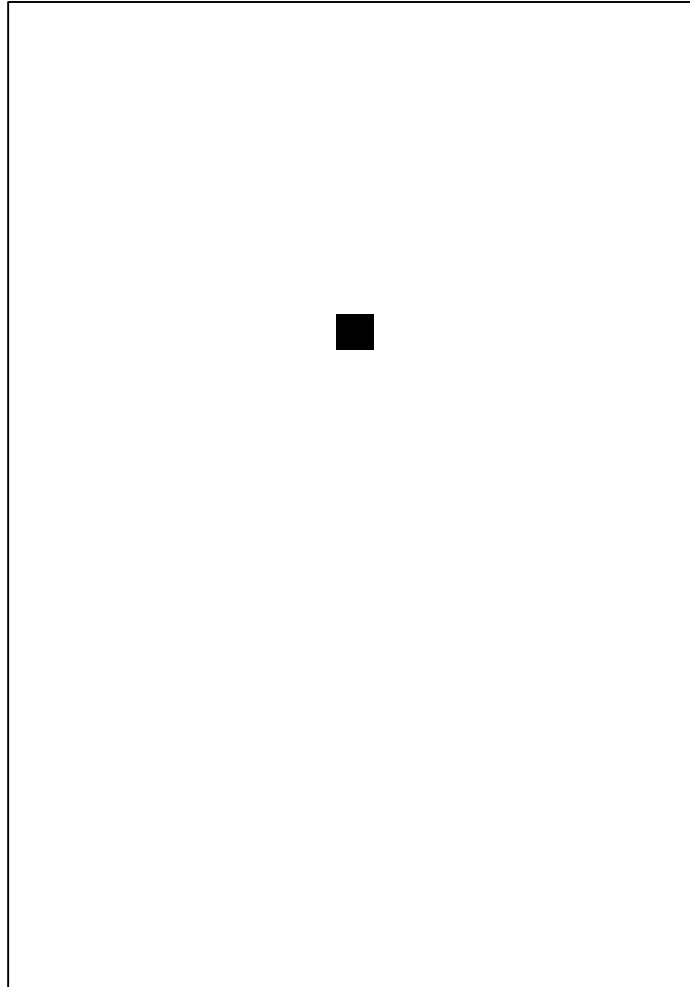
(Partidário, 2007, 2012)

How to start ST4S?

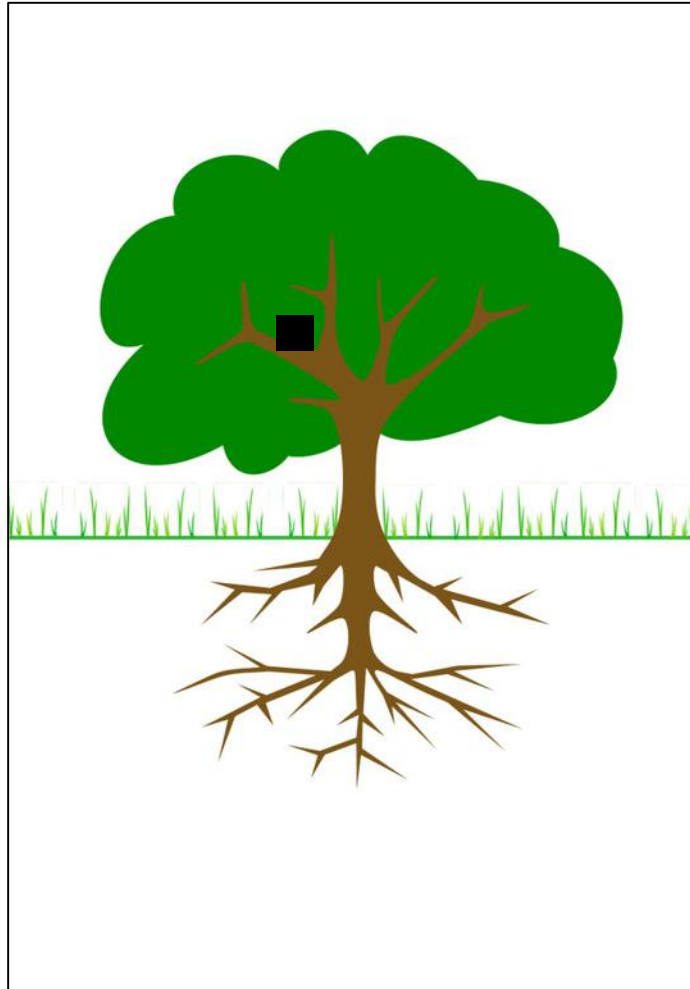
What are the strategic objectives and the priorities (or where do we want to get)?

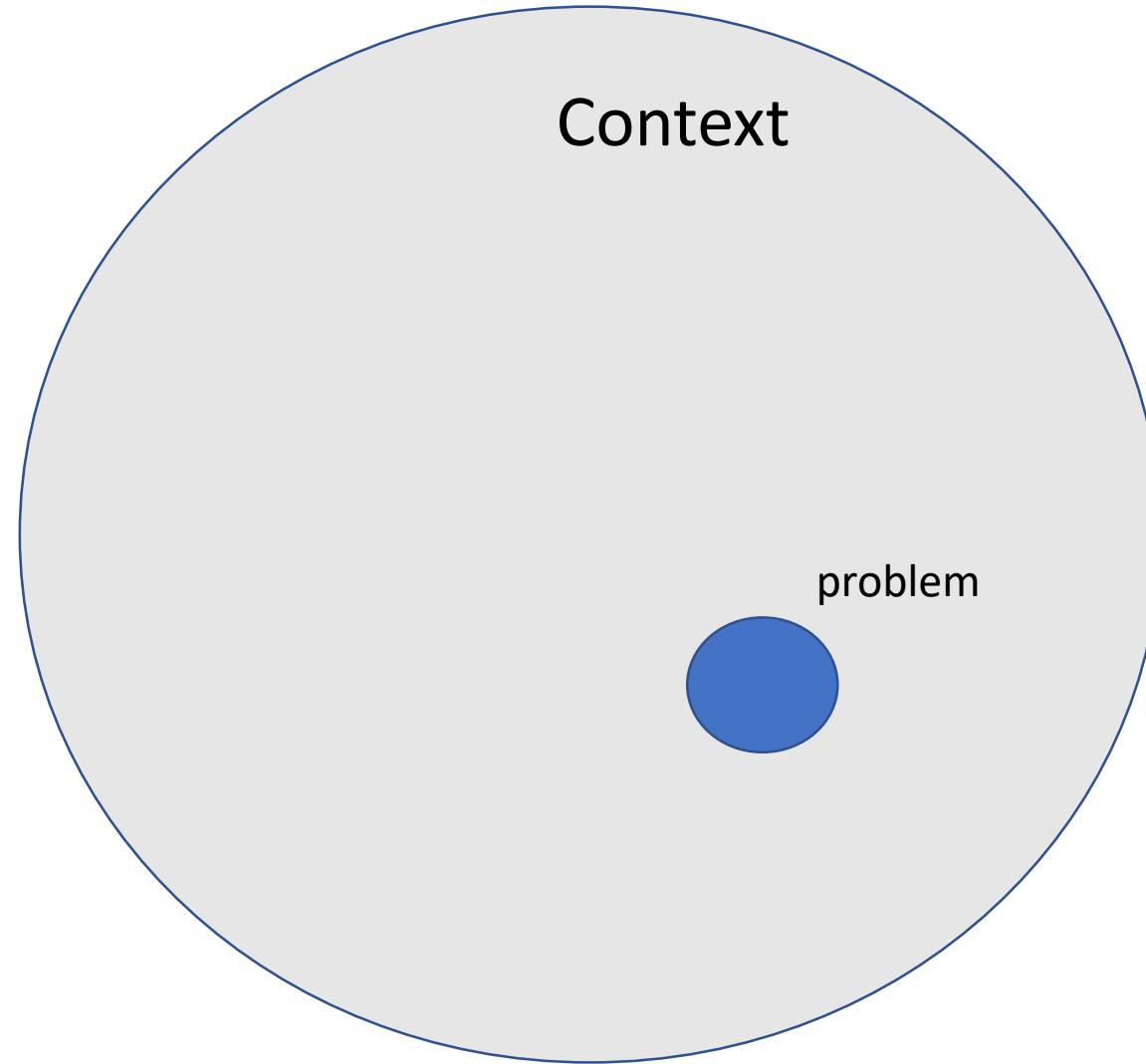
What is the context for SEA (where do we start)?

What do you see in the image?



The context changes/determines the content







Ensure
focus

Understand the context for SEA and the priorities

- the strategic issues (what is intended)
- the problem framework (multi-actor perspective)
- the driving forces (what pushes change)
- the macro-policies (Strategic reference framework)
- the stakeholders (Governance framework)

Understand the context for SEA

What are the strategic development (PPP) objectives and the priorities (**PPP strategic issues**)?

Strategic-thinking model for sustainability (ST4S)

Strategic issues (Partidário 2012)

Policy choices that address critical challenges to achieve a vision
– requires **positioning in the future, rather than simply reacting to problems**

Criteria to define strategic issues:

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

Understand the context for SEA

What are the key problems?

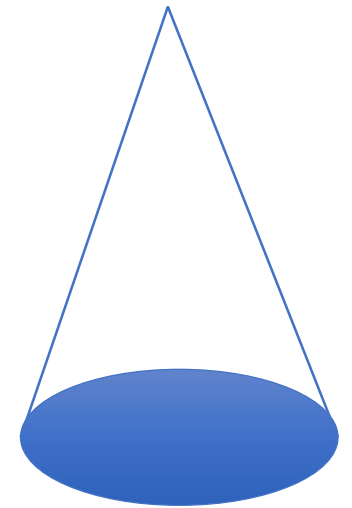
What are environmental and sustainability (development):

- Problems
- Sensitivities
- Potentials

What are the underlying causes of stress (and the drivers of change)

What are environmental and development priorities

Explanatory
indicator

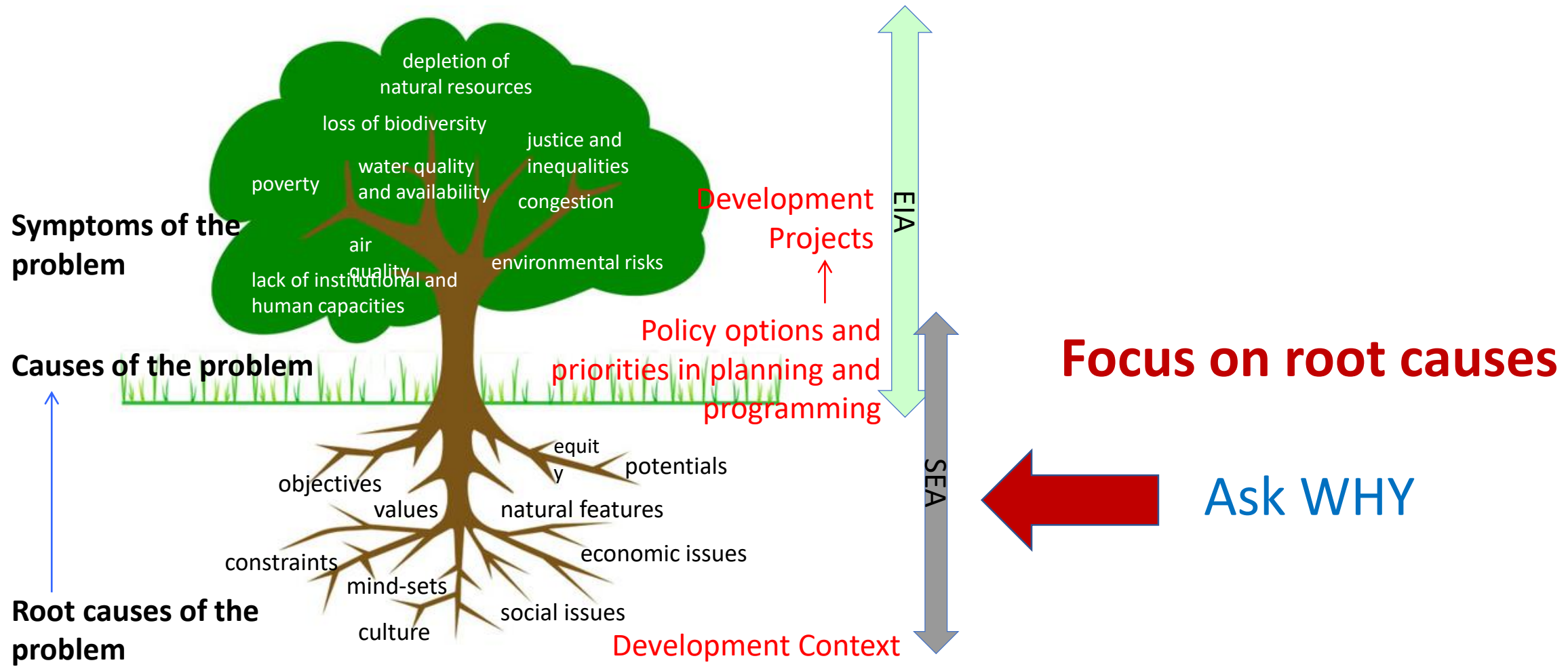


Descriptive indicators

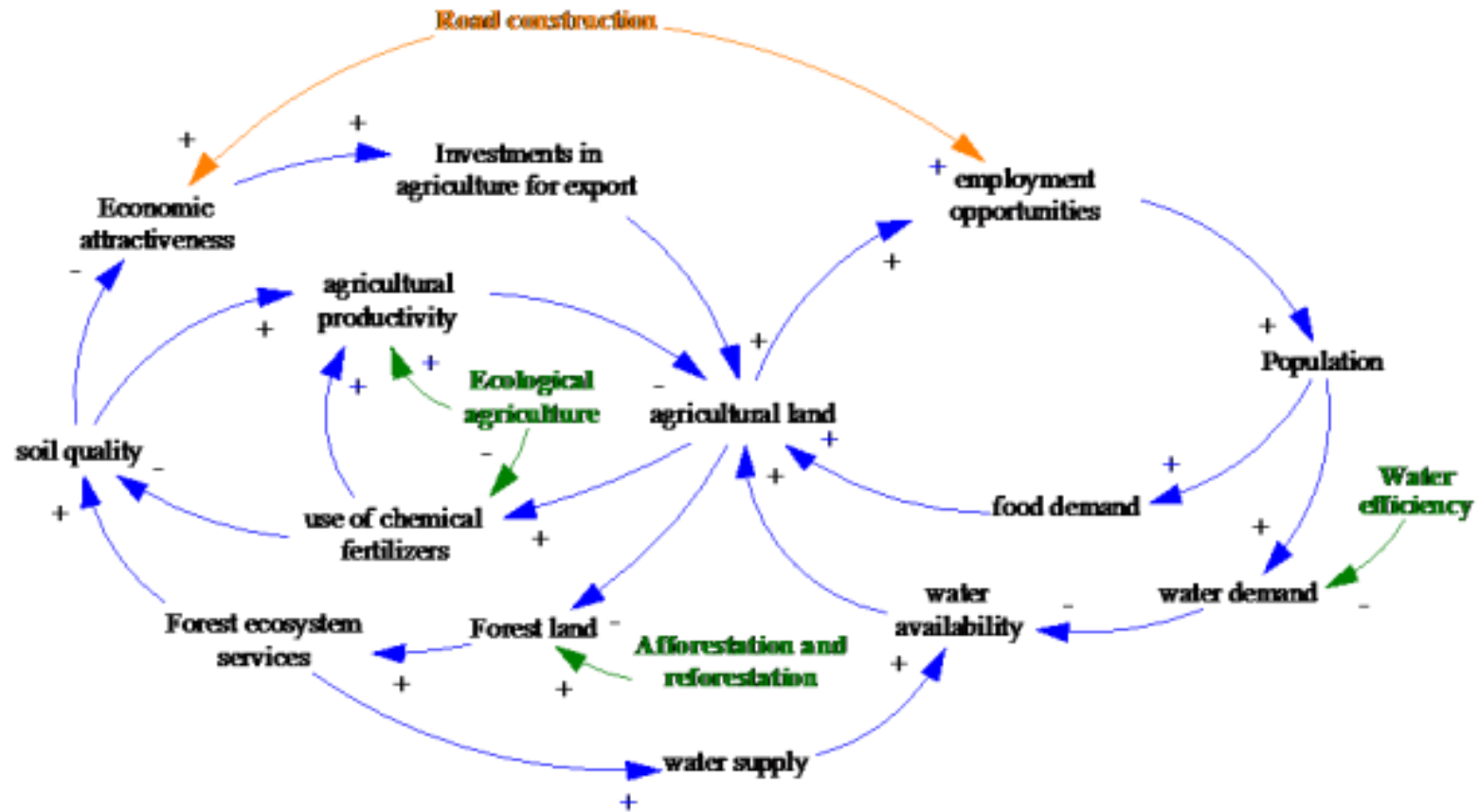
Build a problem framework – strategic environmental and sustainability (ES) issues that combine PPP and ES issues

Understand the problem -

Problem tree



Mind – mapping or Causal loop (systems thinking)



Understand the context for SEA

What is the policy context (agenda for priority setting - directions for future – **strategic reference framework**)?

Strategic Environmental Assessment (SEA)

As a strategic assessment framework for achieving sustainable development

Strategic Reference Framework – macro-policies that set the reference for strategic assessment



Questions

- Which SDG / targets are relevant for this strategic assessment?
- How can strategy S contribute to achieving SDG X, Y and Z?



Understand the context for SEA

Who are the stakeholders and their linkages?

Get focused to identify Critical Decision Factors

FOCUS

Priorities in a broad integrated
sustainability context

Visioning

Priority setting

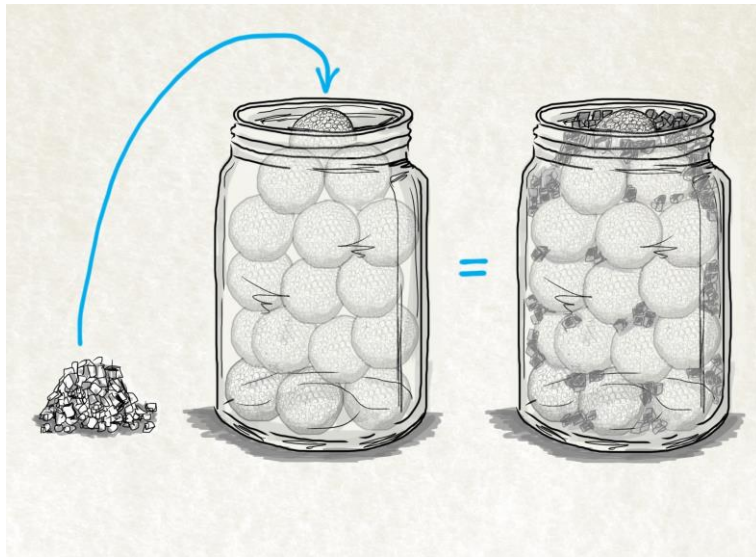
Focus on what is relevant

Perceptions – mind-mapping

Critical Decision Factors

Strategic-thinking model for sustainability (ST4S)

“Strategic” implies that some decisions and actions are considered more important than others



Prioritize

Focus: Put important things first

<https://www.youtube.com/watch?v=hWaksMPvJ4c>

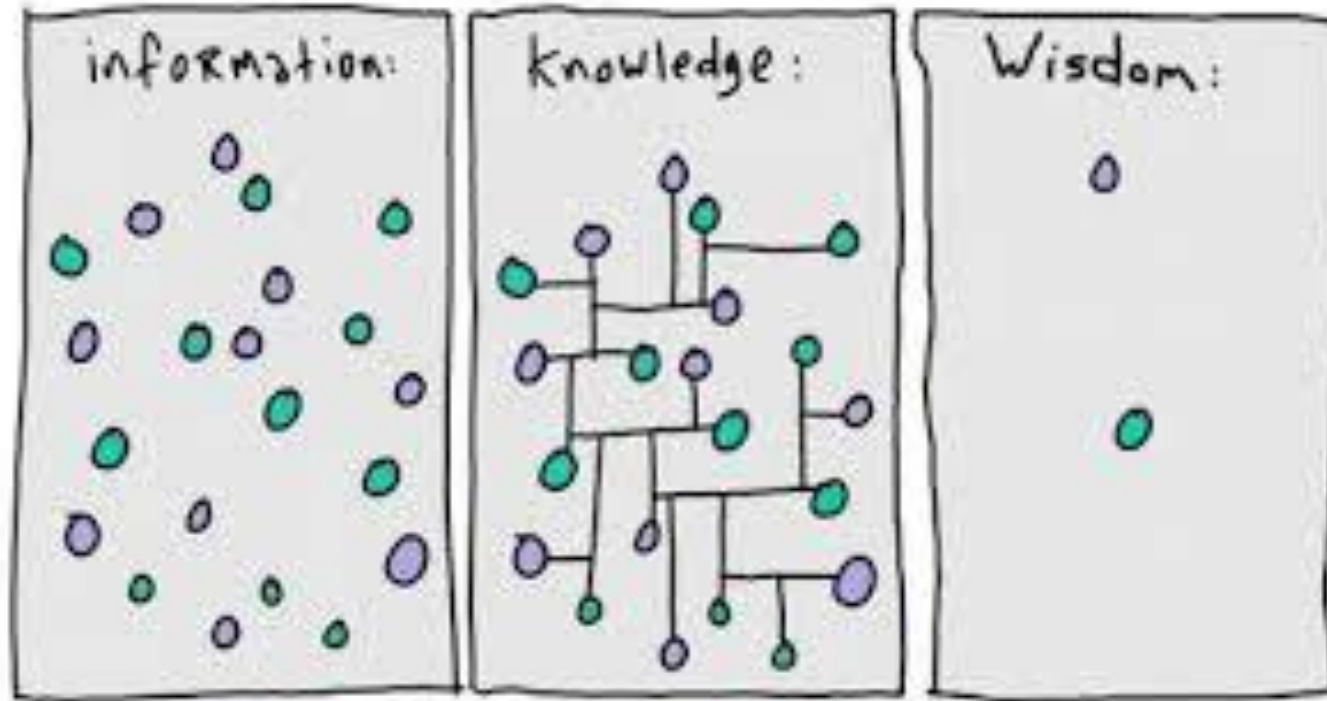


off the mark.com

by Mark Parisi



Get focused



The Critical Decision Factors represent the wisdom

From data to wisdom

Russel Ackhoff wisdom theory, 1989

Strategic issues (SI)

- Development.....
- Capacity-building.....
- Sustainability.....
-

Problem framework (PF)

Environmental and sustainability issues (ESI)

| Conflicts | Sensitivities | Potentials | Drivers of change |
|-----------|---------------|------------|-------------------|
| | | | |

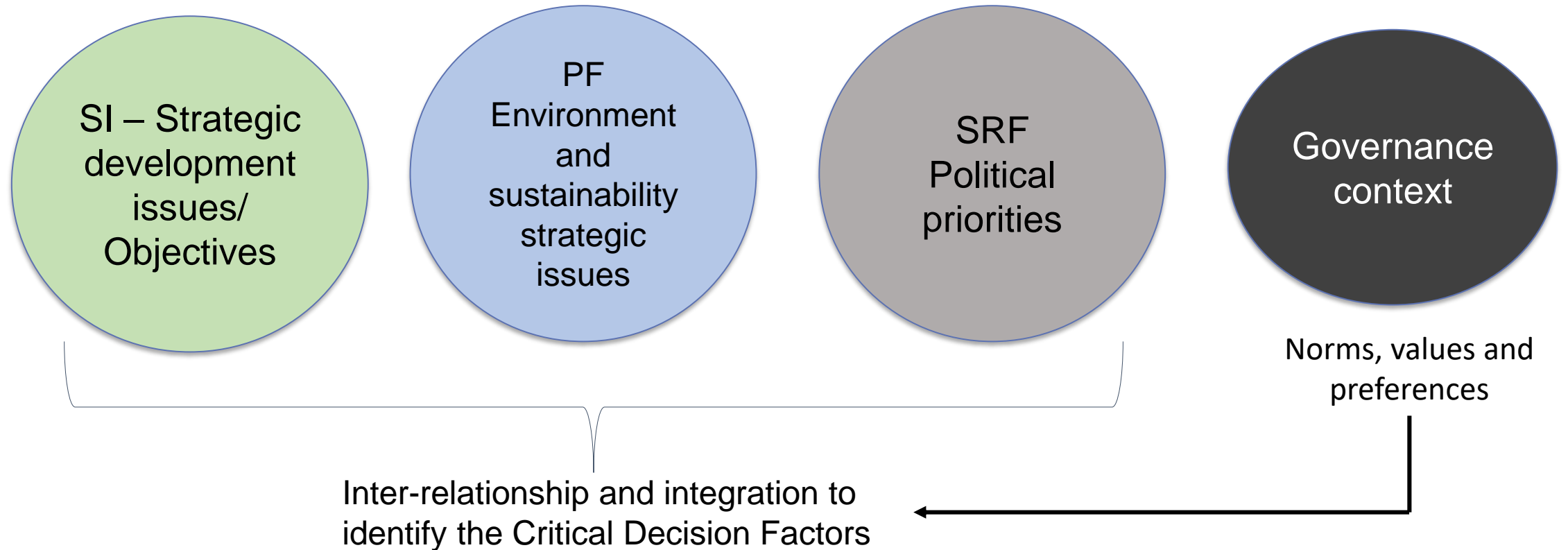
Strategic reference framework

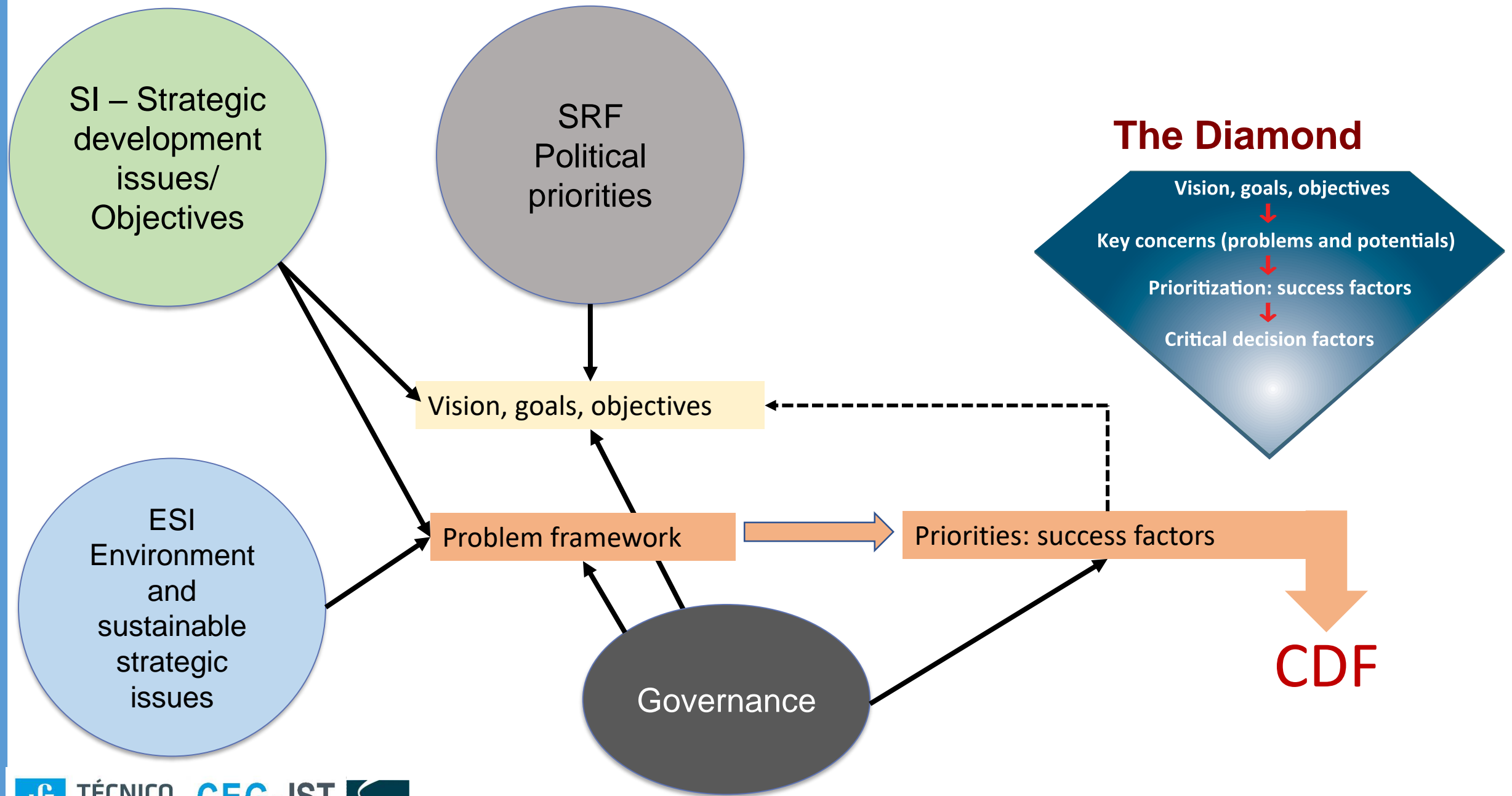
| Macro-policies | Objectives | Targets |
|----------------|------------|---------|
| | | |

Governance framework

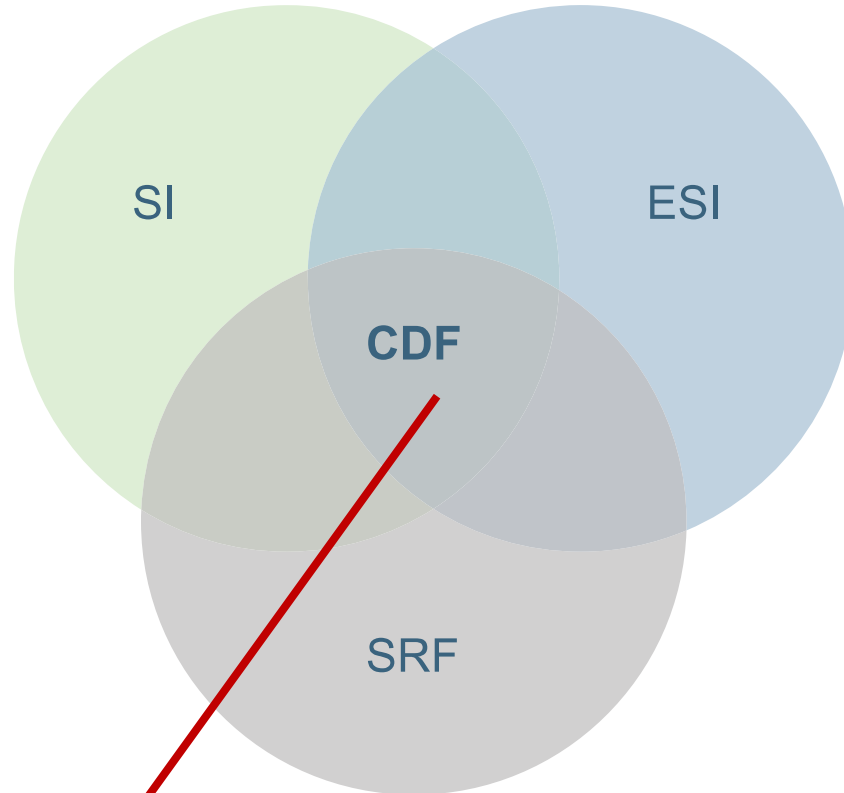
| | Stakeholders (relational matrix) | |
|----------------------------|----------------------------------|-------|
| Roles and responsibilities | links | links |

Understand the context





Mapping Critical Decision Factors



(3 < CDF < 7)

SI – strategic development issues

ESI – environmental and sustainability issues

SRF – Strategic Reference Framework (macro-policies)

CDF – assessment criteria - indicators

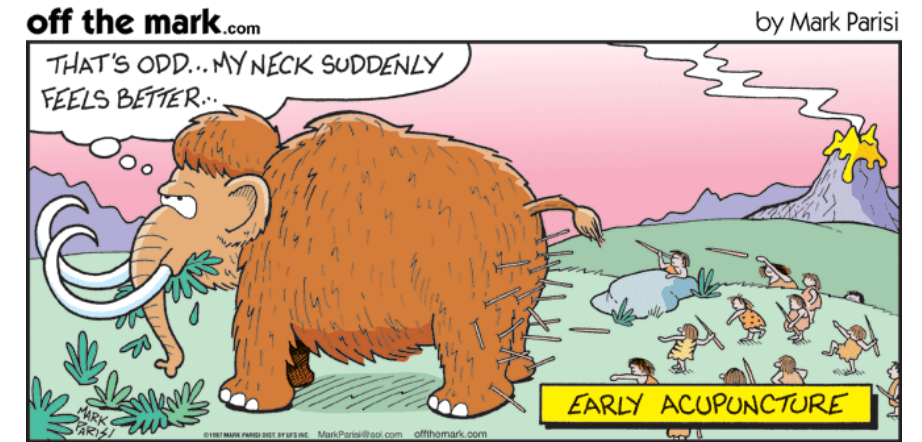
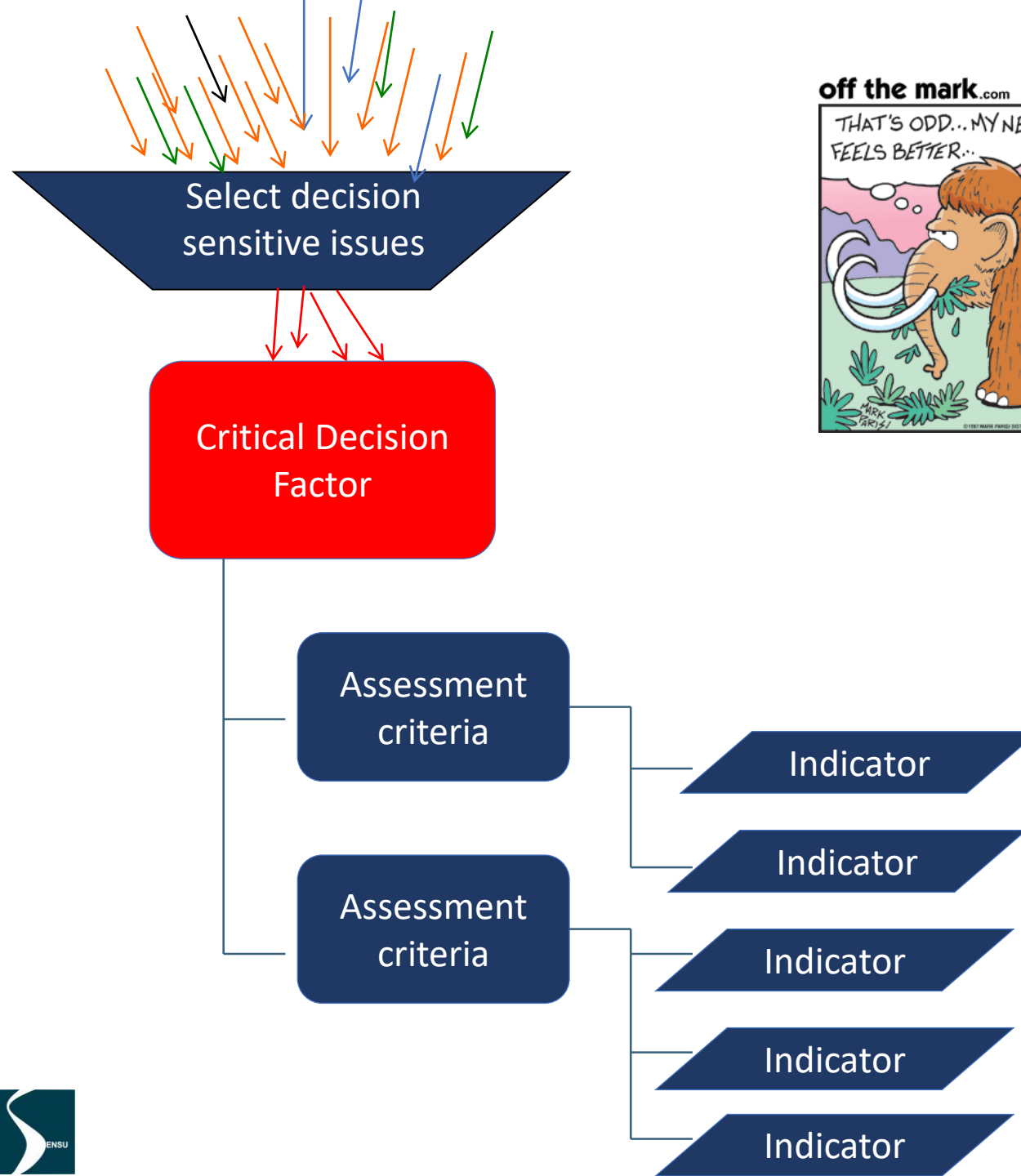
The Diamond



**Get focused and identify
Critical Decision Factors (CDF)**

*CDF are integrated/holistic factors
that represent priorities for strategic
decisions to ensure sustainable
outcomes in the long-term*

Critical Decision Factors



Mapping CDF and generating the assessment framework

Problem framework (ESI)

| Conflicts | Sensitivities | Potentials | Drivers of change | SI |
|-----------|---------------|------------|-------------------|----|
| | | | | |

Strategic reference framework

| Macro-policies | Objectives | Targets |
|----------------|------------|---------|
| | | |

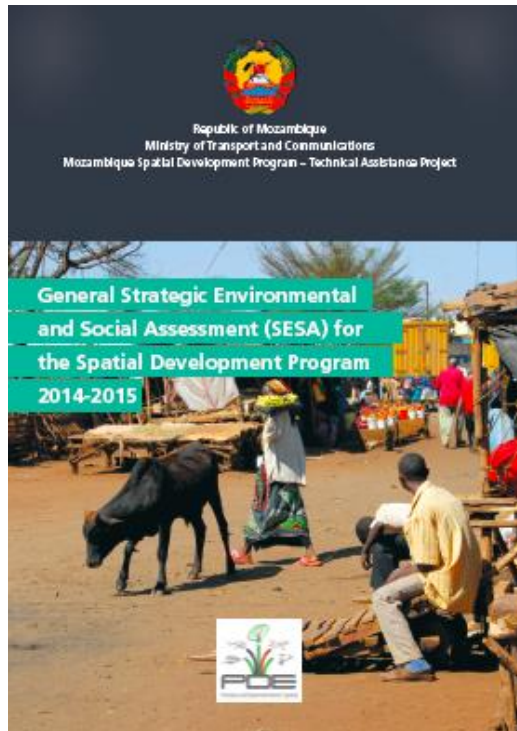
Governance framework

| | Stakeholders (relational matrix) | |
|----------------------------|----------------------------------|-------|
| Roles and responsibilities | links | links |

Assessment framework

| Critical Decision Factors | Assessment criteria | Indicators |
|---------------------------|---------------------|------------|
| | | |

SEA of the Spatial Development Programme 2014-2035 Mozambique



Strategic Issues

The Ministry of Transport and Communications (MTC) is implementing the Spatial Development Program (SDP) to **create institutional capacity on spatial planning**, and to **prepare Spatial Development Initiatives (SDIs)**.

An SDI attempts to **unleash the sustainable economic development potential** in development corridors, underpinned by anchor projects and underlying infrastructure investments for transport, power, water and the like.

Anchor projects are owned and operated by the private and/or public and private sectors and utilize physical, human, natural and infrastructure resources.



Initiative

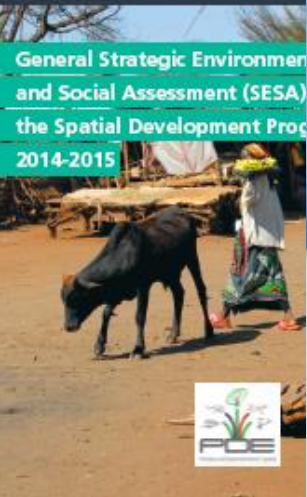
Seven corridors are included : Maputo, Beira, Zambezia, Nacala, Libombos, Mueda and North-South, each with distinct economic, environmental and social characteristics, priorities and challenges. Maputo, Beira, Nacala and Zambezia are being developed or practically with a completed concept, while Libombos, Mueda and North-South are still in early conceptual stages.



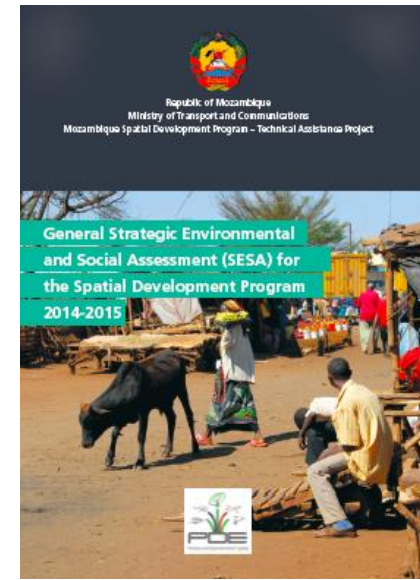
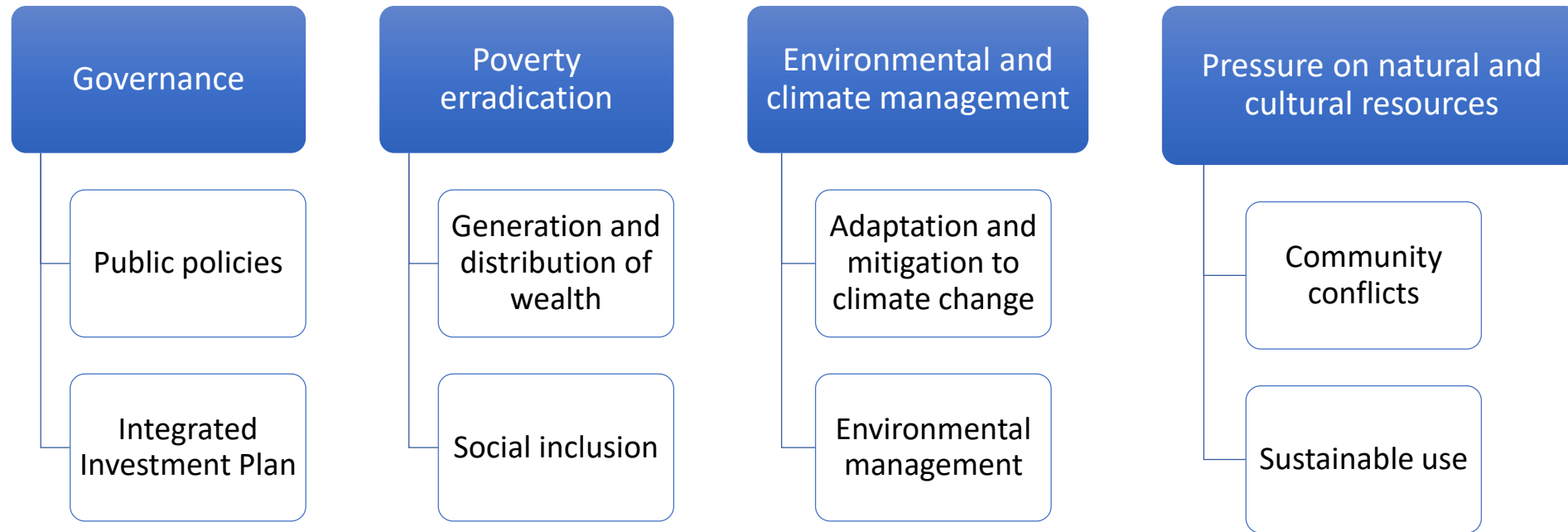
Problem framework

Table 3 - Problem framework – key aspects

| Key Potentials | Key sensitivities and risks | Key challenges |
|---|--|---|
| <ul style="list-style-type: none"> • Growth of infra-structure • Development of value chains linked to anchor projects • Increase in economic advantage and competitiveness • Strengthening of the local economy and social opportunities | <ul style="list-style-type: none"> • Sensitive ecosystems • Cultural heritage • Climate change risks • Poverty | <ul style="list-style-type: none"> • Economic and social valuation of natural resources • Engagement and benefits for vulnerable communities • Public governance leadership and inter-sectoral cooperation |



Critical Decision Factors and assessment criteria



ASSESSMENT

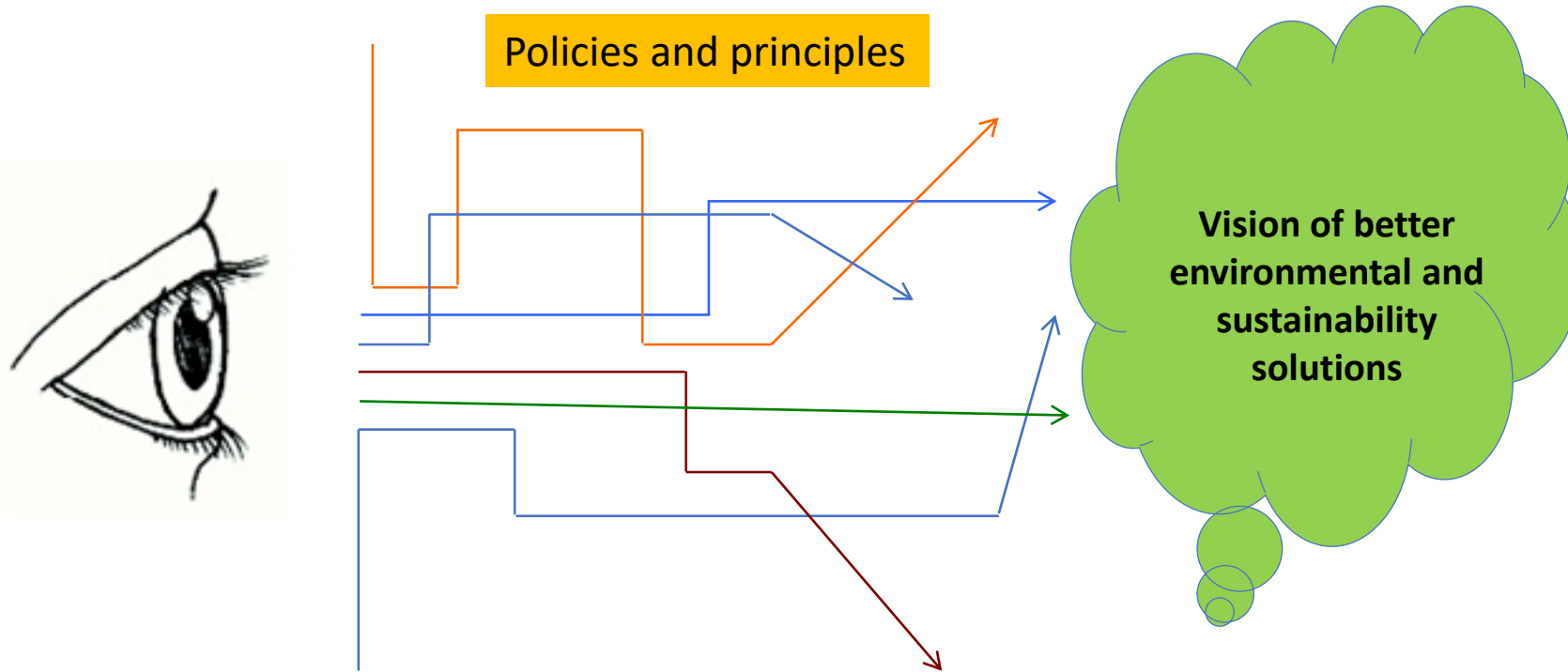
Use Trend analysis

Identify strategic options

What may be risks and opportunities of strategic options

Provide guidelines as orientations (governance, management, monitoring)

Strategic options



Optional pathways to enable strategic objectives, towards sustainability

(Partidário, 2007, 2012)

Assess Opportunities and Risks

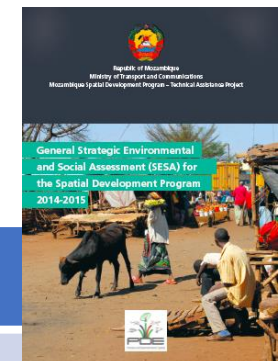
Use CDF to assess conditions for development
Indicate the direction of a trend for a specific pathway.

Assess benefits to the natural, social and cultural values (opportunities) and possible damaging outcomes (risks) and what this means in relation to sustainable development processes



Opportunities and risks

Opportunities and risks for each CDF were identified – examples given here:



| CDF | Opportunities and Risks (examples) |
|--|--|
| Governance | <p>O: integration of environmental and social issues through participated and collaborative planning and development processes enhancing communities knowledge</p> <p>R: Insufficient corporate social and environmental responsibility</p> |
| Poverty eradication | <p>O: Several infrastructures (sewage systems, water supply, waste management, electricity supply, accessibility) and public services (health, education security) will be developed as environmental investment opportunities</p> <p>R: The investment on public infrastructure be insufficient, or even inexistent</p> |
| Environment and climate change | <p>O: Reduced vulnerability of people, land and goods to climatic extreme events</p> <p>R: Increased aggressiveness of climate extreme events with negative effects through severe flooding or drought</p> |
| Pressure on natural and cultural resources | <p>O: Adopt adequate policy for local content and social and local economy programs that respect community livelihood dependence on natural and cultural resources.</p> <p>R: Destruction of biodiversity hotspots, scared forests and cultural heritage including in urban areas</p> |

Outputs – orientations for other levels of planning

Main Policy Recommendations

Establish a policy on SESAs that *inter alia* distinguishes between strategic level SESAs (e.g., SDP) and operational SESAs (development corridor, region or sector).

Establish a policy for the use of spatial planning.

Establish institutional coordination mechanisms for inter-sectoral spatial planning, involving government, private sector and civil society stakeholders.

Promote outside the SDP training on spatial planning, development corridors and SESAs.

Establish a policy to ensure that investments in development corridors address environmental and social priorities (including the green economy, climate change and energy efficiency) as well as economic priorities.

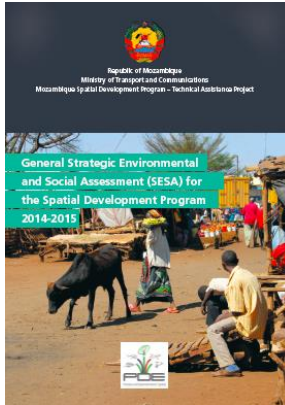
Establish a policy on local content policy relevant to all significant investment in development corridors.

Establish a policy to ensure the open dissemination of spatial planning, GIS, environmental and social data.

Establish a policy concerning follow-up of the General SESA and corridor level SESAs.

Outputs – orientations for other levels of planning

- Population evolution and movements;
- Poverty incidence and measures to reduce poverty;
- Promotion of local content and income generation of local community based on sustainable resources management;
- Potential re-settlements and characteristics of respective community livelihoods;
- Health issues;
- Capacity-building of human resources;
- Climate change vulnerable areas, and disaster risks;
- Ecological sensitivities;
- Culture sensitivities concerning culture heritage;
- Major expected land use changes;
- Water quality and availability;
- Waste management plans;
- Soil destruction and conflicts with mining, agriculture and forestry activities;
- Governance issues concerning coordination across ministries, private sector and with communities and NGOs
- Level of engagement of local communities and local authorities in discussing the future development of local areas;
- Enforcement of public policy for spatial planning, social inclusion and environmental management; and
- Environmental investment opportunities.



**Continual dialogues (process links,
engagement) and follow-up
(monitoring, evaluation)**

Processes links means

Link terminology / concepts between PPP and SEA

Knowledge sharing and Information

Identifying decision points (decision windows)

Stakeholders engagement for both PPP and SEA

Communication strategy for both

Reporting (aligned)

Timeline (aligned)

Example of linking planning and SEA processes

Policy-making / planning process

Strategic Environmental Assessment

| Processo PDIRT | Início AAE | Cenários e opções | Simulações | | Consulta | | Pdirt-final | | | |
|--|--------------|-------------------|------------|--------------------|-----------|-----------------|----------------------|-----------|----------------------|----------------|
| AAE – Estudos para AAE | Jul-Ago 2007 | Set-10 Out 2007 | 10-15 Out | 15 Out-10 Dez 2007 | 10-15 Dez | Jan-15 Feb 2008 | 15 Feb - 25 Mar 2008 | 25-31 Mar | 31 Mar - 25 Jun 2008 | 25-31 Jun 2008 |
| Coordenação e Acompanhamento processo | | | | | | | | | | |
| Estabelecimento do processo e calendários | | | | | | | | | | |
| Análise do ciclo de processo do PDIRT e identificação de momentos críticos | | | | | | | | | | |
| Definição de conteúdos e formatos de estudos e relatórios | | | | | | | | | | |
| Coordenação de Estudos | | | | | | | | | | |
| Entrega de conclusões orientativas | | | | | | | | | | |
| Entrega de relatórios | | | | | | | | | | |
| Consulta de entidades | | | | | | | | | | |
| Consulta de agentes e público | | | | | | | | | | |
| Estabelecimento do processo de seguimento e quadro institucional | | | | | | | | | | |
| Declaração Ambiental | | | | | | | | | | |
| Acompanhamento do processo | | | | | | | | | | |
| Factores Críticos para a Decisão | | | | | | | | | | |
| Q RE, FA e QE do PDIRT | | | | | | | | | | |
| FCD, Critérios e indicadores | | | | | | | | | | |
| Relatório de FCD | | | | | | | | | | |
| Apreciação de comentários das entidades | | | | | | | | | | |
| Análise e Avaliação - Estudos | | | | | | | | | | |
| Análise de tendências e caracterização - ligação Q RE | | | | | | | | | | |
| Interpretação de cenários | | | | | | | | | | |
| Avaliação de opções | | | | | | | | | | |
| Identificação de oportunidades e riscos | | | | | | | | | | |
| Conclusões orientativas | | | | | | | | | | |
| Justificação de oportunidades e riscos | | | | | | | | | | |
| Apreciação de comentários das entidades e público | | | | | | | | | | |
| Directrizes e indicadores de monitorização | | | | | | | | | | |
| Programa de Seguimento | | | | | | | | | | |
| Relatório ambiental | | | | | | | | | | |

Engagement for creativity and governance

Techniques

Institutional analysis – look for intersectoral links and coordination.

Stakeholder analysis tools (power vs interest)

Stakeholders' perceptions

Public engagement practices

Participatory assessments to prioritize issues

(Partidário, 2007, 2012)

Follow-up: monitoring and evaluation

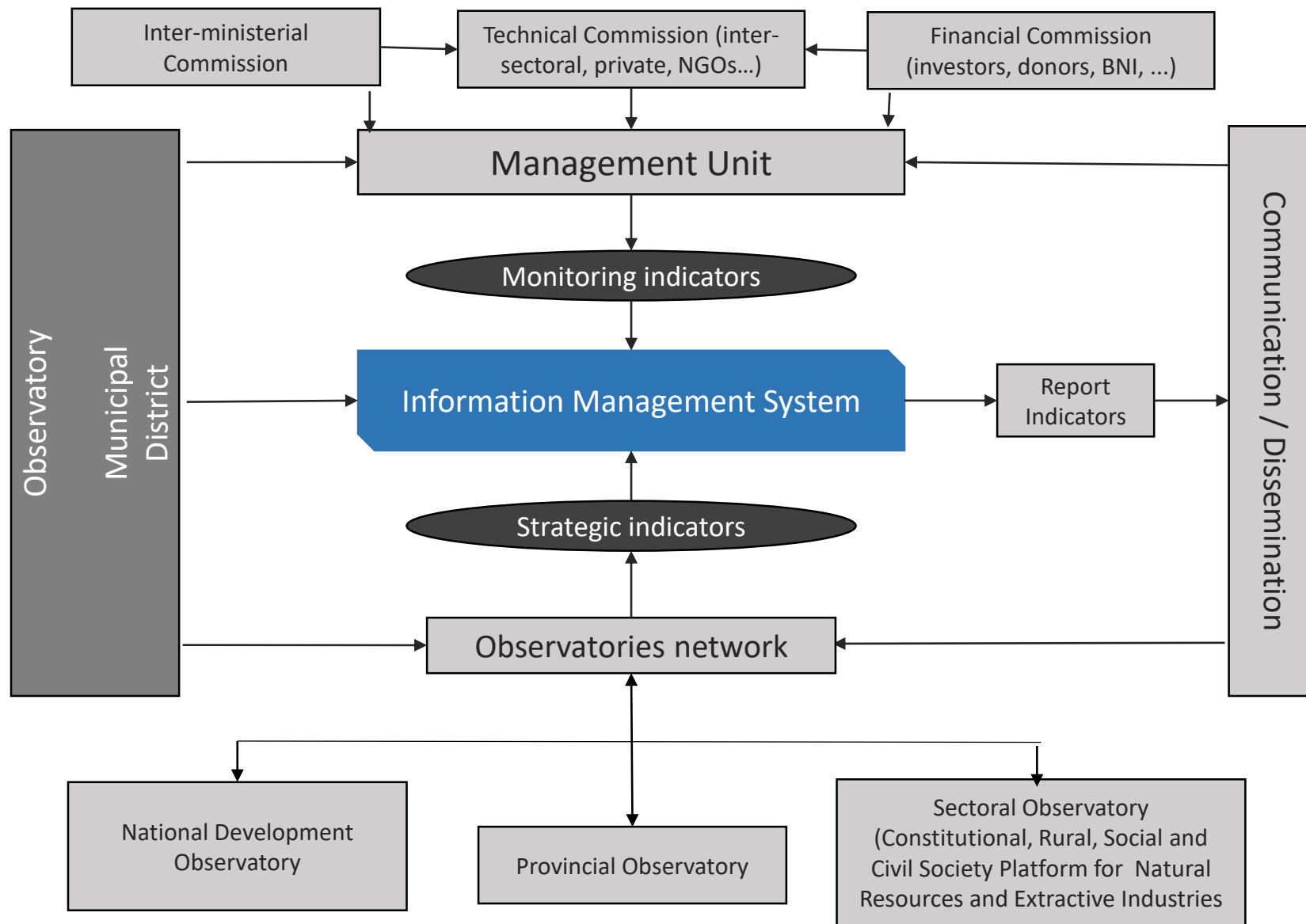
Techniques

Set mechanisms (institutional and technical) for continuous control through monitoring and evaluation

Create a database system to be systematically updated

Identify status as well risk or opportunities indicators

(Partidário, 2007, 2012)



Follow-up:
monitoring and
evaluation

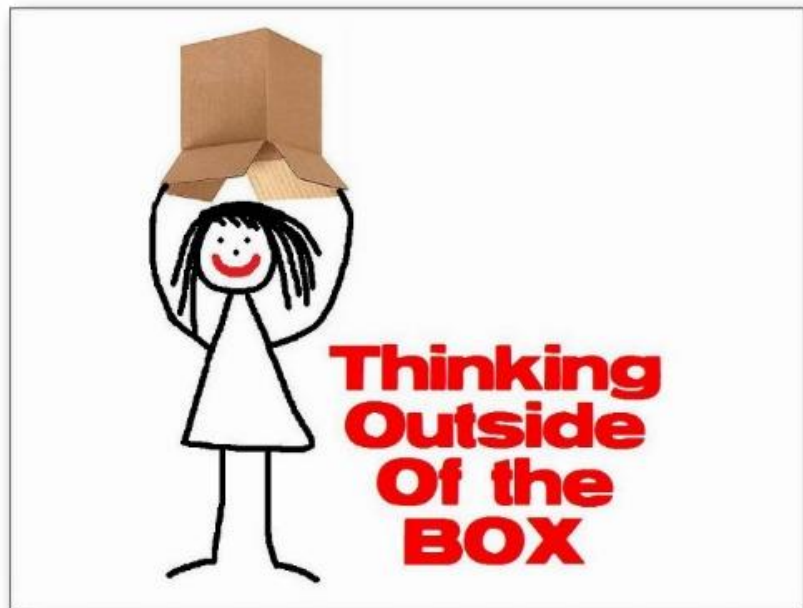
In synthesis

Challenges in Strategic Thinking for Sustainability

Imagine the future you want that enable opportunities

- Act now to reach the future, keep view in the long-term
- Be selective, systemic and focused on what matters
- Put emphasis on values, not on problems (constructive)
- Change, adapt (flexible), learn (resilient)
- Stimulate creative learning and collaboration through dialogues
- Build trust, collective intelligence, embracing plural

Strategic-thinking model for sustainability (ST4S)



QUESTIONS?

Be strategic - open minds
Don't be afraid of change