



IAIA21

VIRTUAL EVENT

#iaia21

Integrating SEA and IWRM in catchment landscape planning and governance

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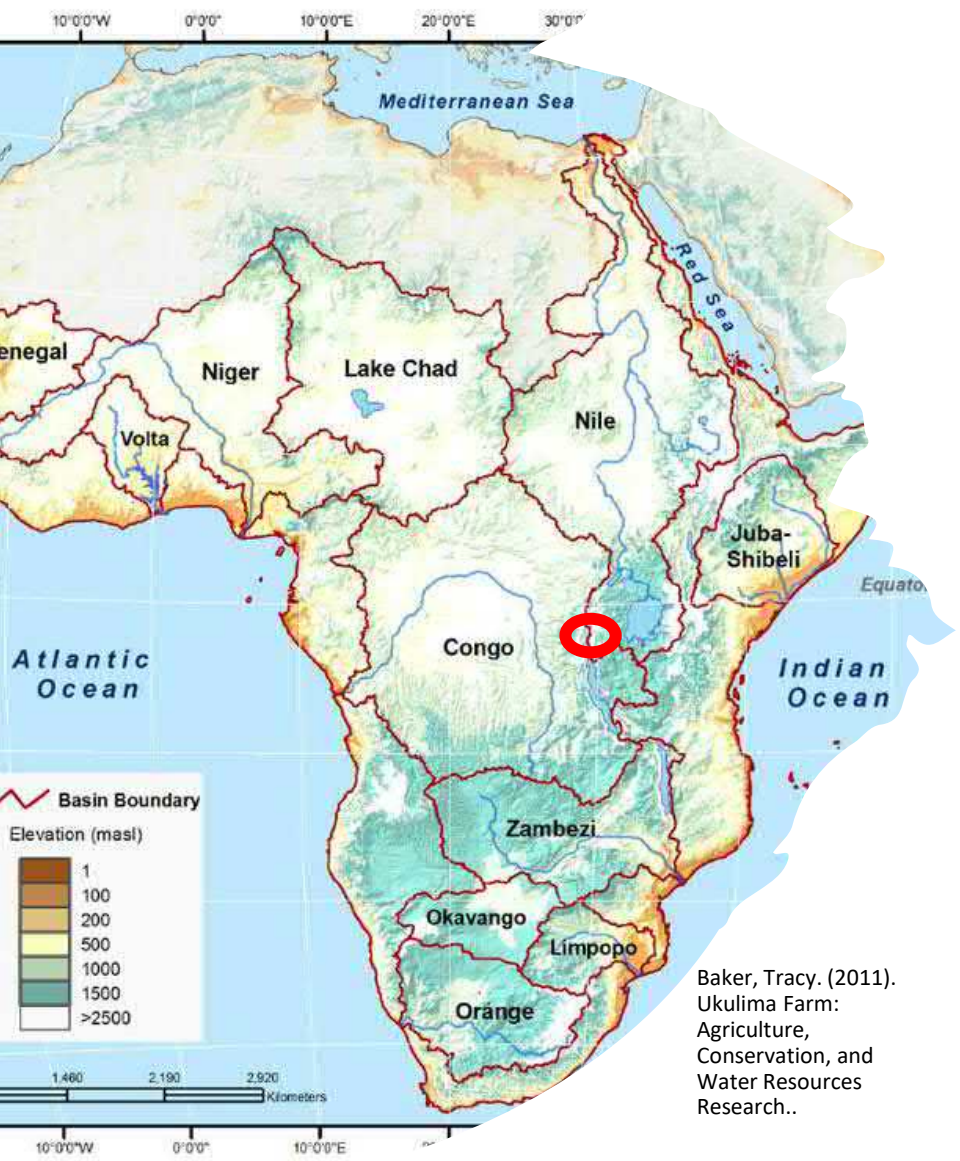


Catchment Landscape Planning in Rwanda

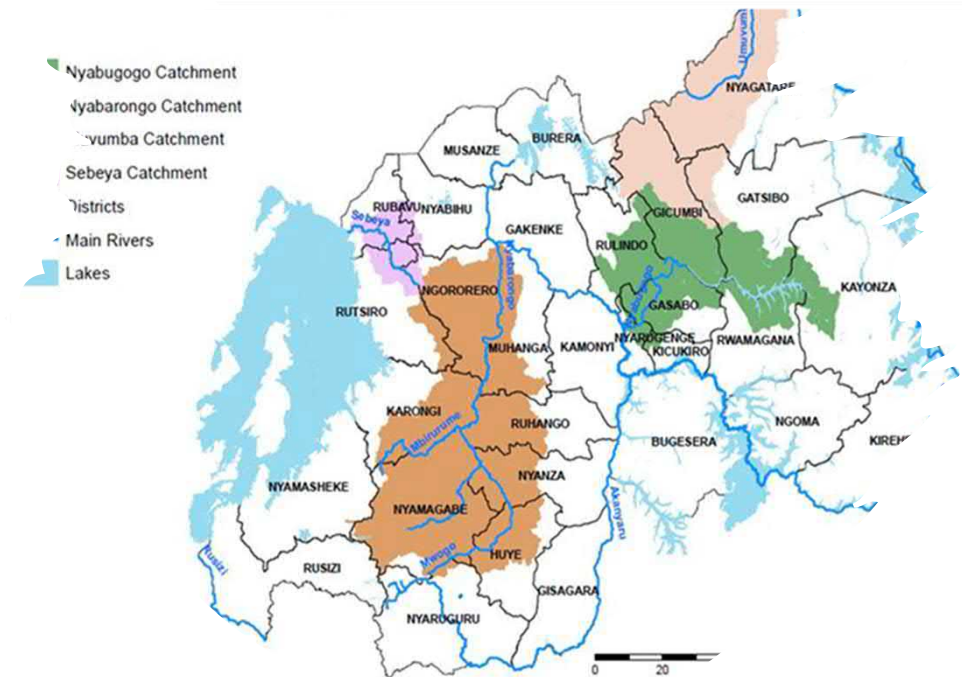
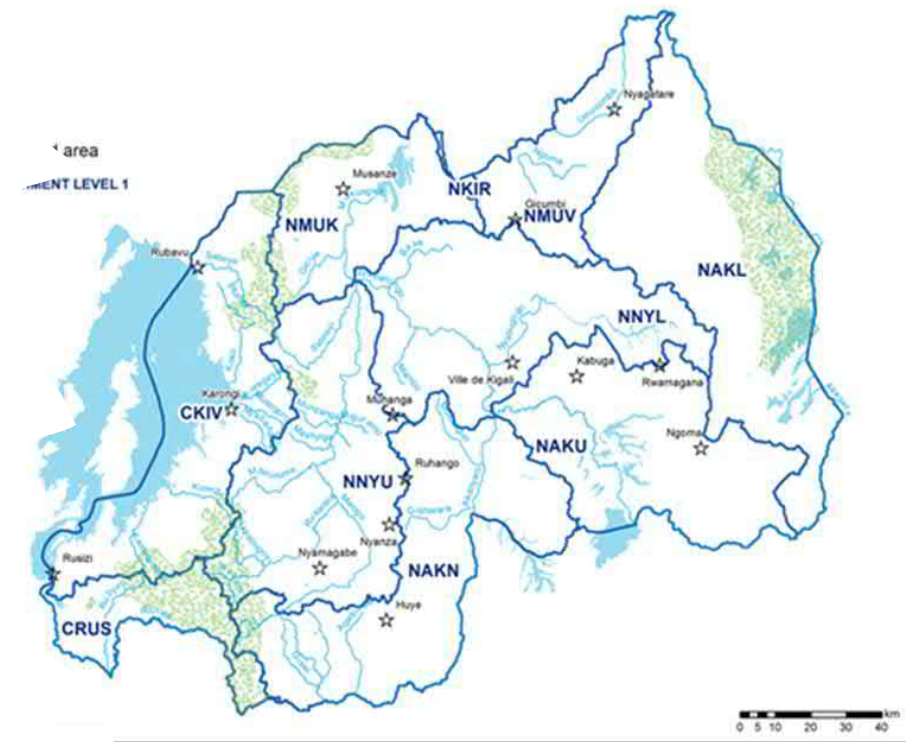
- Strategic plans for integrated management of land and water resources within hydrological 'catchment' boundaries
- First catchment plans in Rwanda
- First application of SEA in Rwanda
- Global first integration of catchment planning and SEA processes



Kingdom of the Netherlands

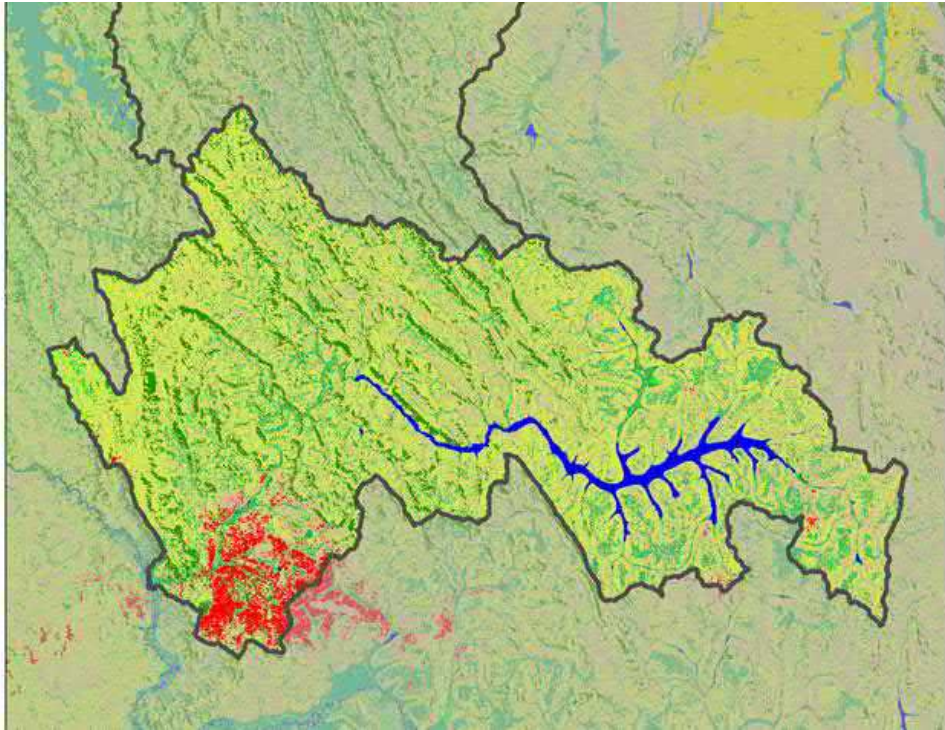


Baker, Tracy. (2011).
Ukulima Farm:
Agriculture,
Conservation, and
Water Resources
Research..



A new layer of governance?

Hydrological versus district boundaries



But you can't challenge national policies!

**Participant from central government entity for
local development**

2015, during NCEA-supported SEA training for
catchment planning

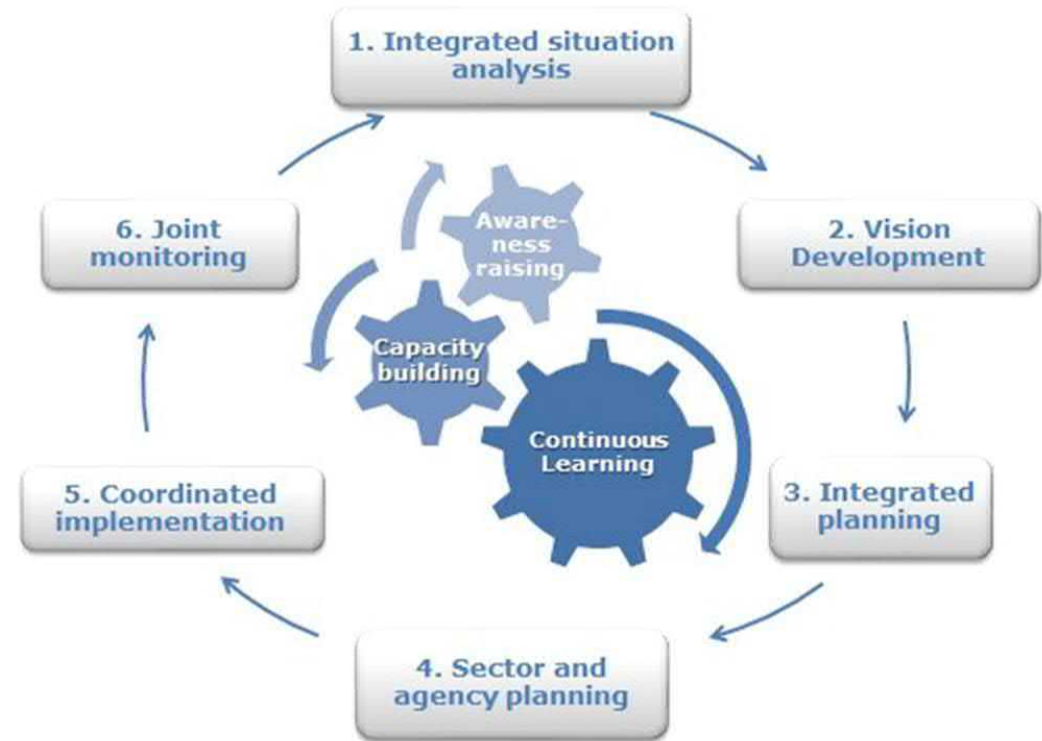
Catchment Landscape Planning – perspective

Integrated management of land and water resources (Water Resources Board)

- Dublin Principles on Water & Sustainable Development (1992)

1. Fresh water is a finite and vulnerable resource
2. Water development & management should be participatory
3. Women play central part
4. Water is an economic good
5. Water is a Human Right (Unesco 2002)

- Planning cycle for Integrated Water Resources Management (IWRM)



Catchment Landscape Planning – perspective

Developing a strategic plan: requires SEA (Environmental Management Authority)

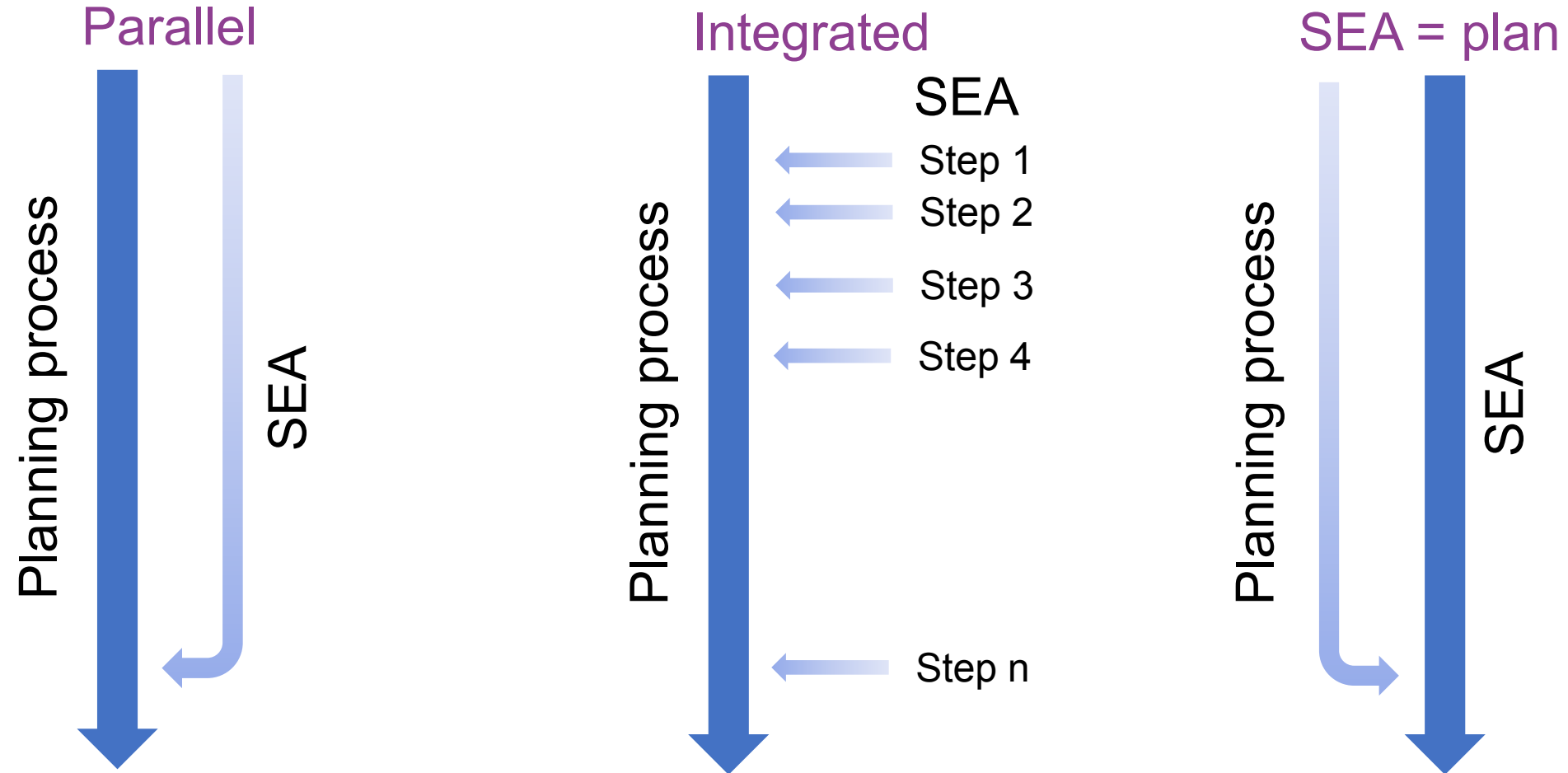
- SEA Process

1. Screening
2. Scoping
3. Assessment
4. Formal decision making
5. Monitoring

Phases in SEA	Steps in SEA
Screening	<ol style="list-style-type: none">1. Reach consensus on the need for SEA and its link to planning;2. Find stakeholders and announce start of the plan process;
Scoping	<ol style="list-style-type: none">3. Develop a shared vision on challenges and opportunities, define plan objectives and draft alternative ways to reach these objectives;4. Do a consistency analysis for relevant (national) policies that have consequences for each catchment;5. Set ToR for the technical assessment, based on scoping results;
Assessment	<ol style="list-style-type: none">6. Assess the impacts of alternatives and document this;7. Review: organise (independent) quality assurance of documentation (preferably involving stakeholders);
Formal decision making	<ol style="list-style-type: none">8. Discuss with all stakeholders the alternative to prefer;9. Motivate the (political) decision in writing;
Monitoring	<ol style="list-style-type: none">10. Monitor the implementation and discuss the results

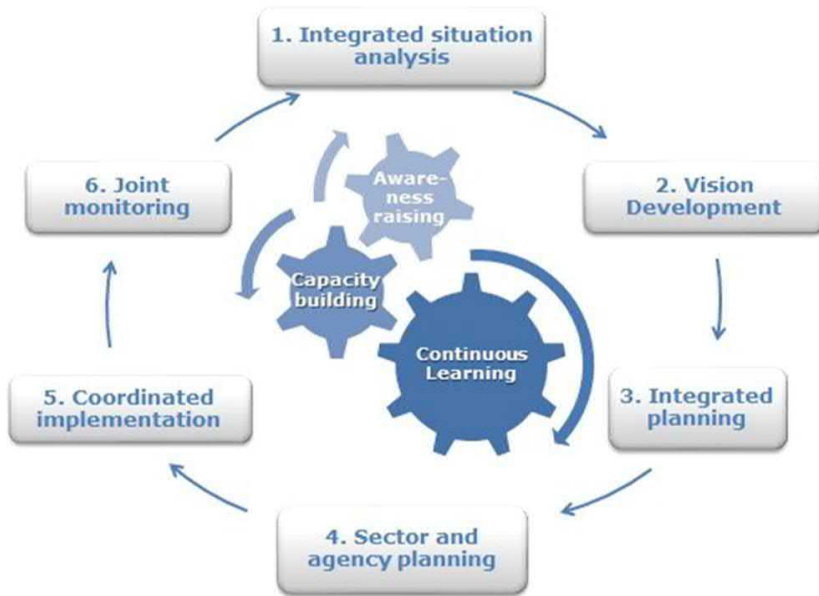
Types of SEA in planning processes

Source: SEA training within Water for Growth Rwanda, NCEA, 2015



Which process to follow?

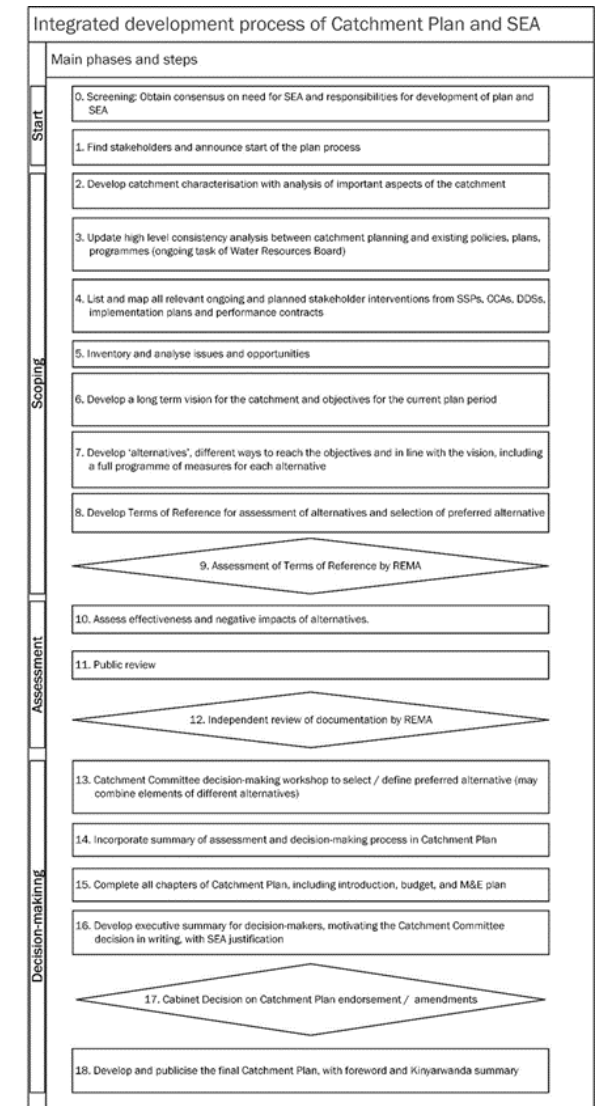
Integrated development process of Catchment Plan and SEA



&

Phases in SEA	Steps in SEA
Screening	<ol style="list-style-type: none"> 1. Reach consensus on the need for SEA and its link to planning; 2. Find stakeholders and announce start of the plan process;
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Assessment	<ol style="list-style-type: none"> 6. Assess the impacts of alternatives and document this; 7. Review: organise (independent) quality assurance of documentation (preferably involving stakeholders);
Formal decision making	<ol style="list-style-type: none"> 8. Discuss with all stakeholders the alternative to prefer; 9. Motivate the (political) decision in writing;
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Detailed Catchment Planning & SEA Manual

Main steps – sub steps – key outputs and roles

- Catchment Plan & SEA Process

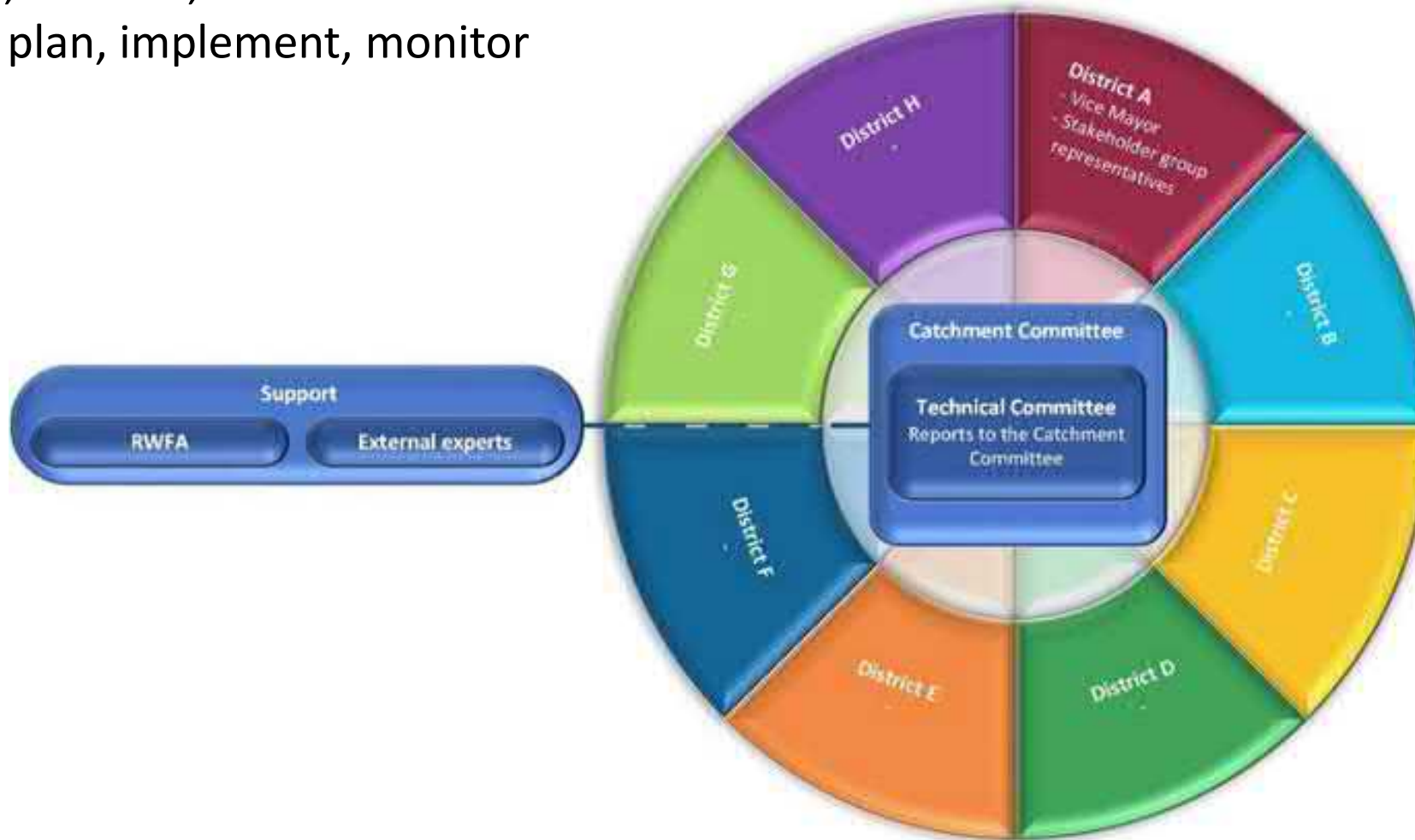
1. Screening
2. Find stakeholders, start up
3. Characterise catchment
4. Consistency analysis
5. List/map interventions
6. Analyse issues/opportunities
7. Validate info, develop vision
8. Develop alternatives
9. Develop ToR for SEA
10. Review ToR for SEA (authority)
11. Assess impacts of alternatives
12. Public review
13. Independent review (authority)
14. Catchment Comm. decision
15. Summarise process in Plan
16. Add implementation plan, M&E
17. Executive summary
18. Cabinet Decision
19. Publicise final Catchment Plan

Results: Governance by Catchment Committee

Chaired by Vice Mayor, stakeholder representatives from each district

CC roles: plan, monitor, evaluate

District roles: plan, implement, monitor

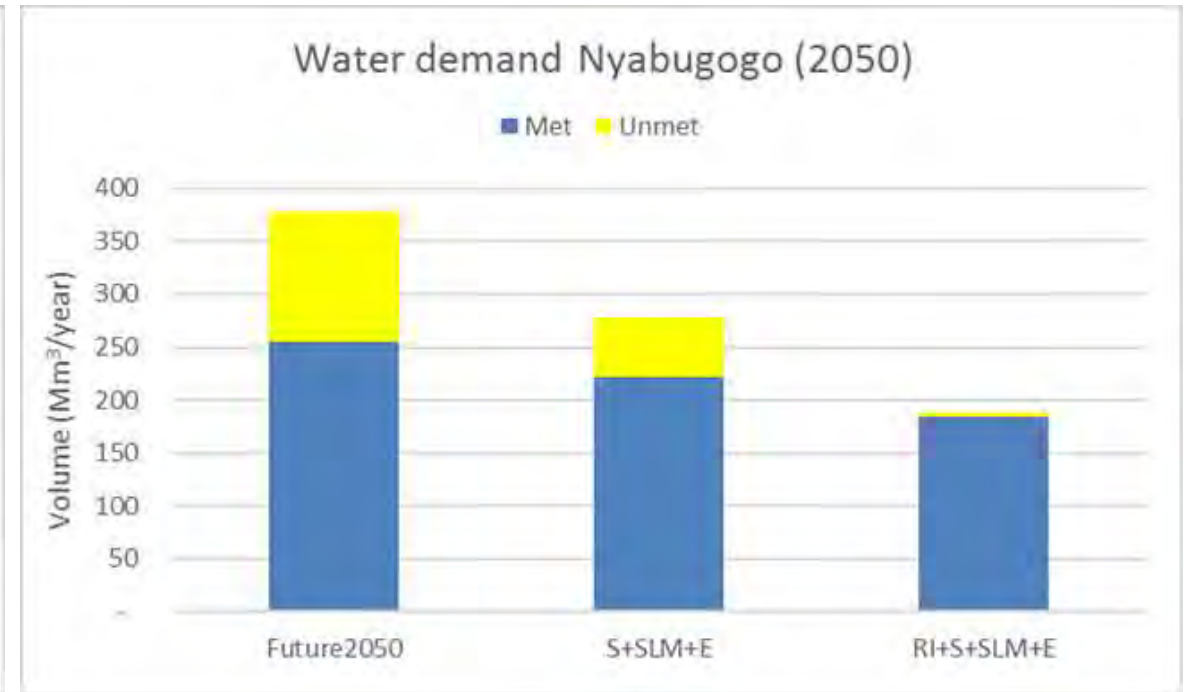
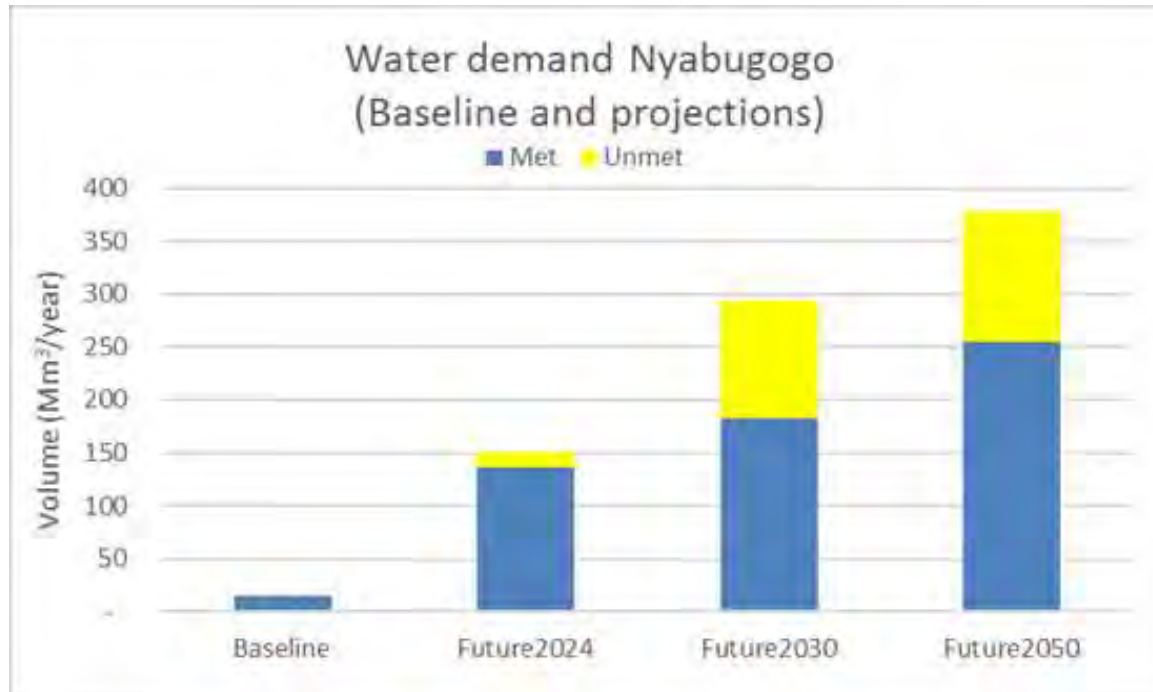


Results: Consistency Analysis



Results: water allocation plan

Alternatives: Storage, Sustainable Land Management, Efficiency, Reduced Irrigation



Results: Catchment Restoration to address soil erosion

For climate resilience, water/energy/food security, biodiversity, Payment for Ecosystem Services

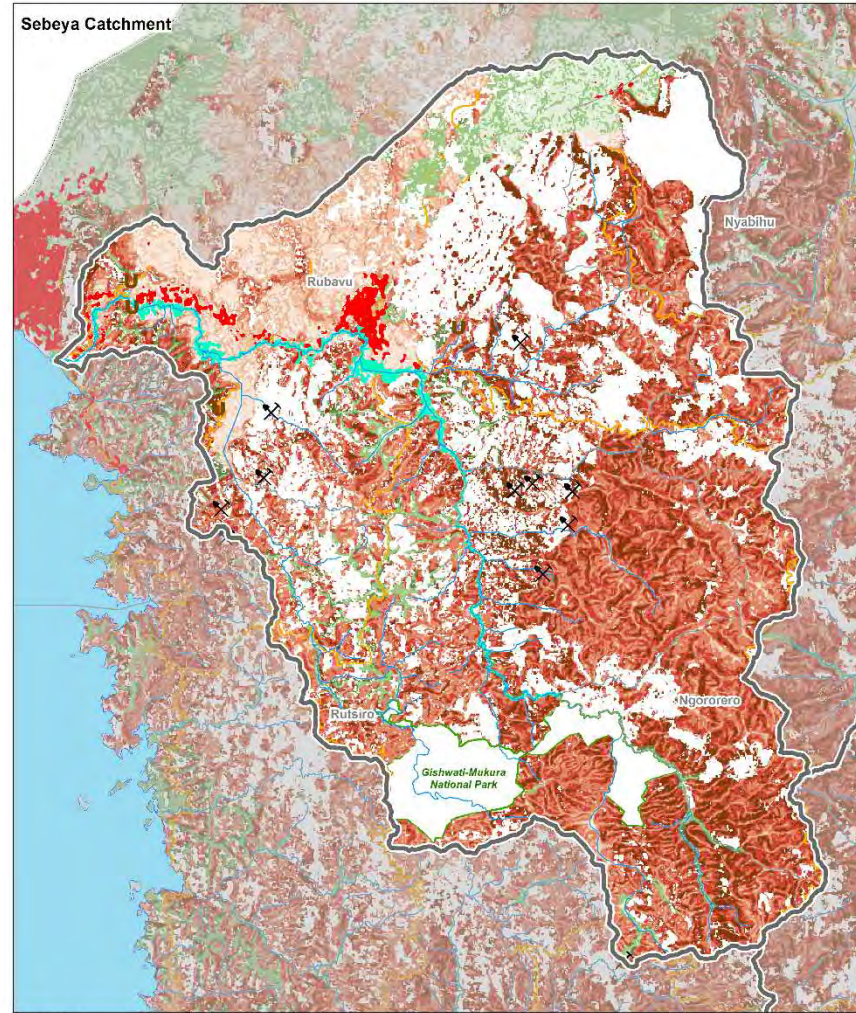


CROM DSS

Catchment-based landscape Restoration
Opportunities Mapping
Decision Support System

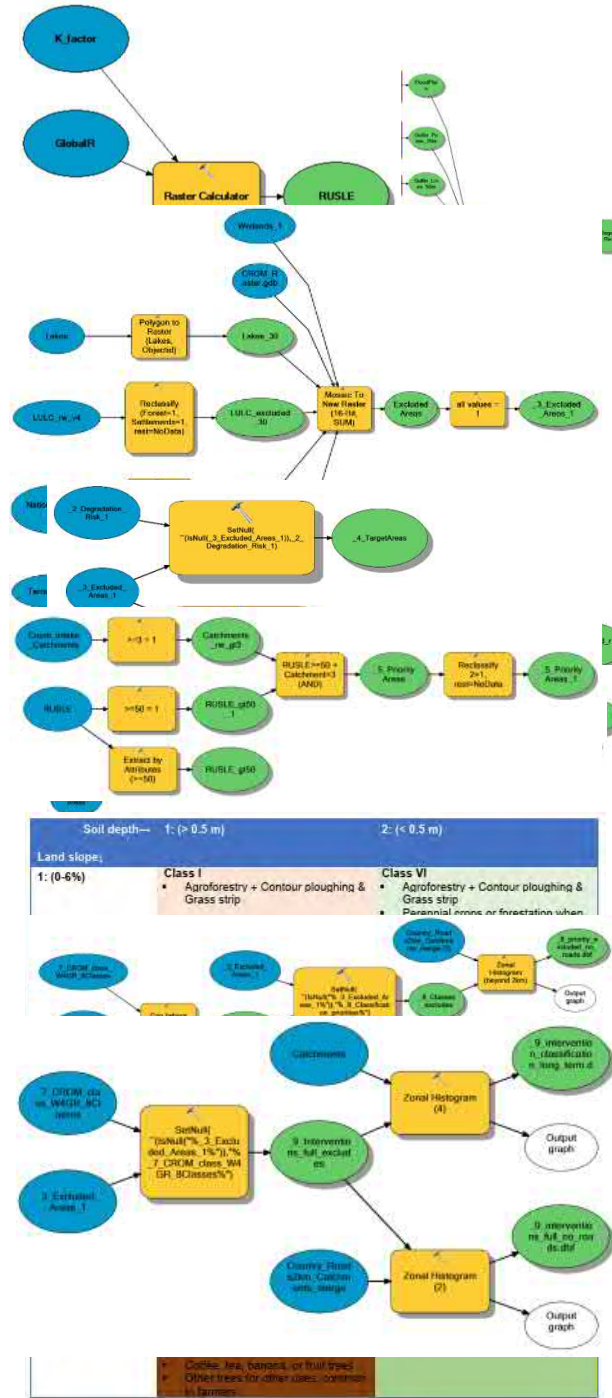
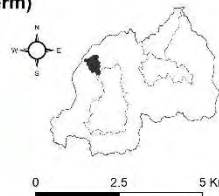


Sebeya Catchment



9. Catchment wide restoration areas with intervention options (long term)

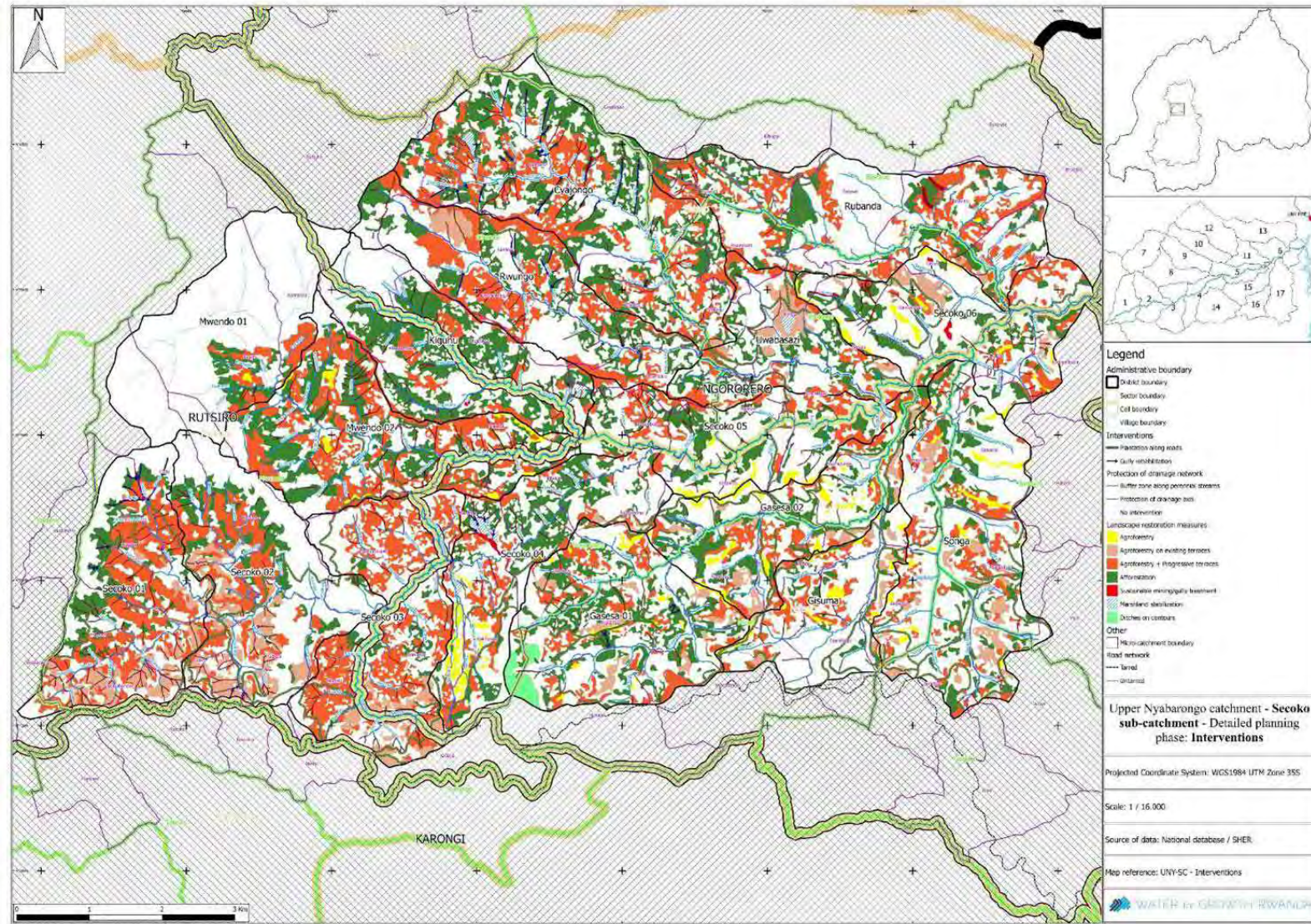
Land slope ↓	Soil depth → ≥ 0.5 m	< 0.5 m
0 – 6 %	Class I	Class VI
6 – 16 %	Class II	Class VII
16 – 40 %	Class III	Class VII
40 – 60 %	Class IV	Class VIII
> 60 %	Class V	Class VIII



Global science, local solutions, Payment for Ecosystem Services



Micro-Catchment Action Plan



Lessons learnt

For replication in Rwanda and elsewhere



Empower Catchment
Committee Chairperson
to convene meetings

Promote critical
consistency analysis

Inform plan partners /
stakeholders up front on
the duration of plan
process, roles and
responsibilities

Strengthen regulations
and guidance

Alternatives should also
focus on opportunities,
not just issues;
objectives broader than
just water

Develop GIS capacity for
spatial planning

Let's continue the conversation!

Post questions and comments via chat in the IAIA21 platform.



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