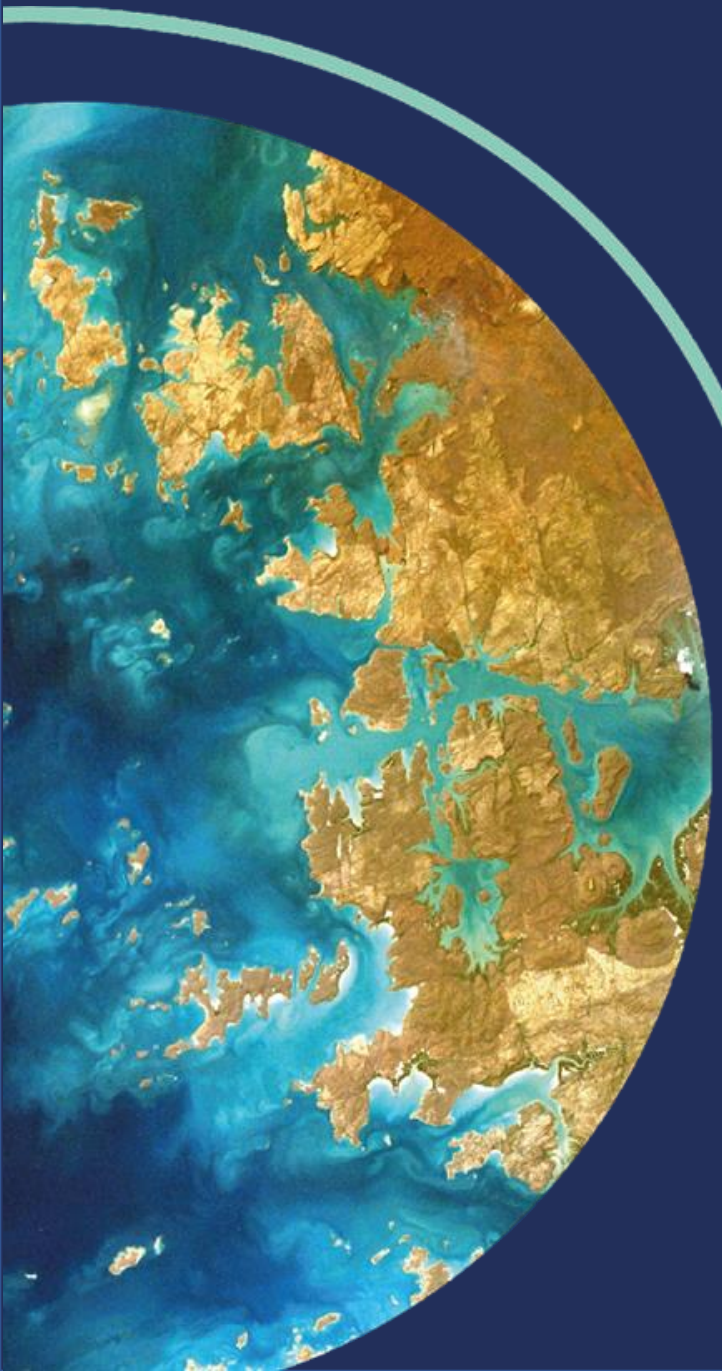


Mapping Essential Life Support Areas in South Africa: Project Reflections

Nokutula Mhene,
UNDP CO South Africa as a Project Management Specialist

Mapping Essential Life Support Areas

GENERATE NATIONAL VISION

1. Identify Policy Priorities

2. Identify National & Global Data to Guide Analysis

IDENTIFY OPPORTUNITIES

3. Locate Important Regions for Nature, Climate & Sustainable Development

4. Review & Revise These Regions With National Experts

CREATE ELSA MAPS

5. Define Where & How Nature-based Actions Can Be Taken in the Country

6. Set Optimization Model Parameters

7. Run Optimization Model to Create Maps of Essential Life Support Areas (ELSAs)

8. Review & Revised Action Maps With National Experts

MAINSTREAM RESULTS

9. Develop Policy Recommendations

10. Take Action & Monitor Results

COMMUNICATE PROGRESS

Mapping Essential Life Support Areas

GENERATE NATIONAL VISION

Step 1: Identify Policy Priorities

- Identify **key policies** for your country related to nature, climate, and development
- Identify **nature-based targets** and actions that have the potential to be mapped
- Prioritize up to **10 targets** for which the analysis will create a roadmap to achieve

Mapping Essential Life Support Areas

GENERATE NATIONAL VISION

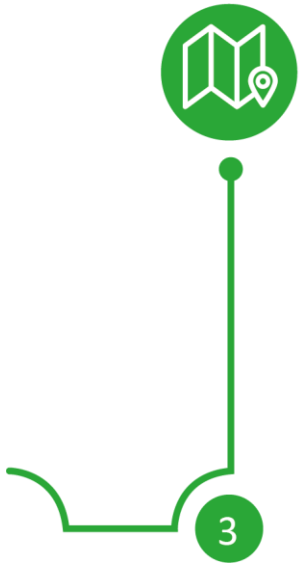
Step 2: Identify National and Global Data to Guide the Analysis

- Identify **national and global spatial datasets** that relate to the policy targets
- These datasets will **spatially represent the policy targets** in the analysis

COMMUNICATE PROGRESS

Mapping Essential Life Support Areas

IDENTIFY OPPORTUNITIES

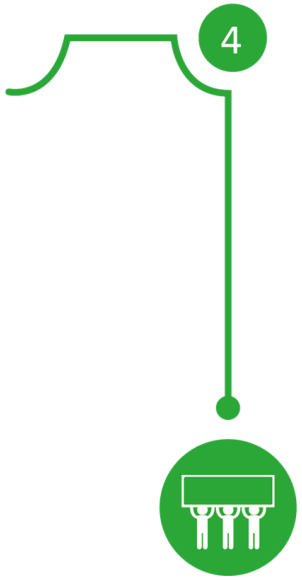


Step 3: Locate Important Regions for Nature, Climate & Sustainable Development

- Use GIS software to **visualize spatial data** layers to see where they overlap
- Identify '**high-value**' and '**low-value**' locations that indicate important ecosystems

Mapping Essential Life Support Areas

IDENTIFY OPPORTUNITIES

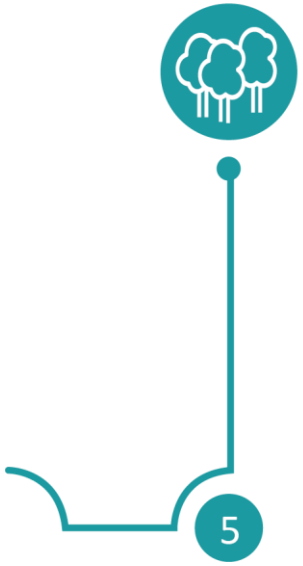


Step 4: Review & Revise These Regions with National Experts

- Gather national experts
- Use their knowledge to review these locations and identify:
  - What regions **appear important but are not**, and vice versa
  - What **national datasets** are needed to fill gaps

Mapping Essential Life Support Areas

CREATE ACTION MAPS



Step 5: Define Where & How Nature-based Actions Can Be Taken

- Determine the **total amount of land area** that can be allocated to potential **nature-based actions**, such as protection, management, or restoration
- **Visualize land zoning maps** using GIS software to identify the range of locations where it is possible to protect, manage, or restore nature

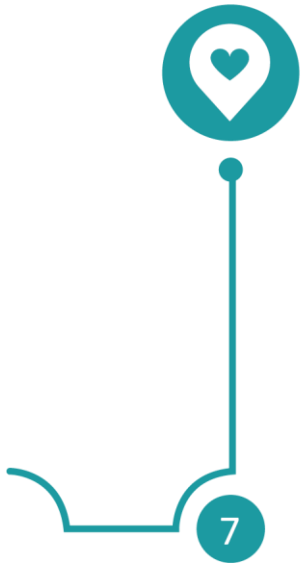
Mapping Essential Life Support Areas

Step 6: Set Optimization Model Parameters

- Gather expert opinions to **assign weights** to:
  - Each spatial dataset to reflect the **priority** of each policy target
  - The **potential impact** that each nature-based action can have on achieving each policy target

Mapping Essential Life Support Areas

CREATE ACTION MAPS



Step 7: Run Optimization Model to Create Maps of Essential Life Support Areas (ELSAs)

- Use the software **Prioritizr** to run the model
- Create **individual nature-based maps** for targets on nature, climate, or development
- Create ELSA maps that show **where** taking a particular nature-based action can best accelerate **progress towards all targets**

Mapping Essential Life Support Areas

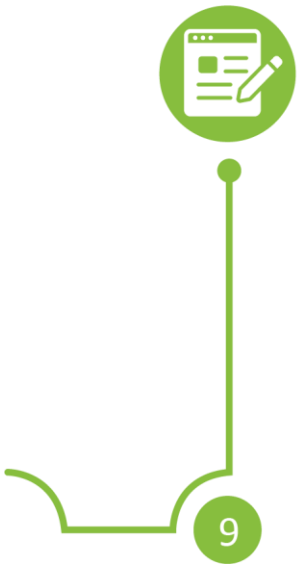
CREATE ACTION MAPS

Step 8: Review & Revise ELSA Maps with National Experts

- Gather national experts to:
  - **Compare potential locations** to take action to achieve different targets
  - Discuss **synergies and tradeoffs**
  - Revise weighting & iterate

Mapping Essential Life Support Areas

MAINSTREAM RESULTS

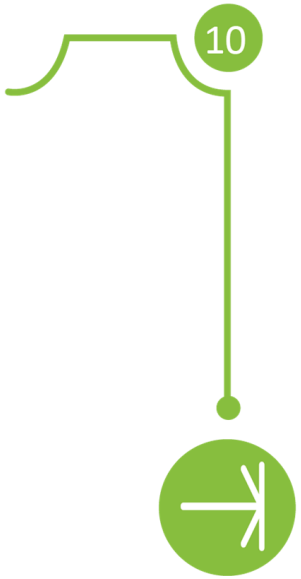


Step 9: Develop Policy Recommendations

- **Assess ELSA maps** in the context of current national policies
- Create **policy recommendations** based on project results
- **Review** with national experts and **revise**

Mapping Essential Life Support Areas

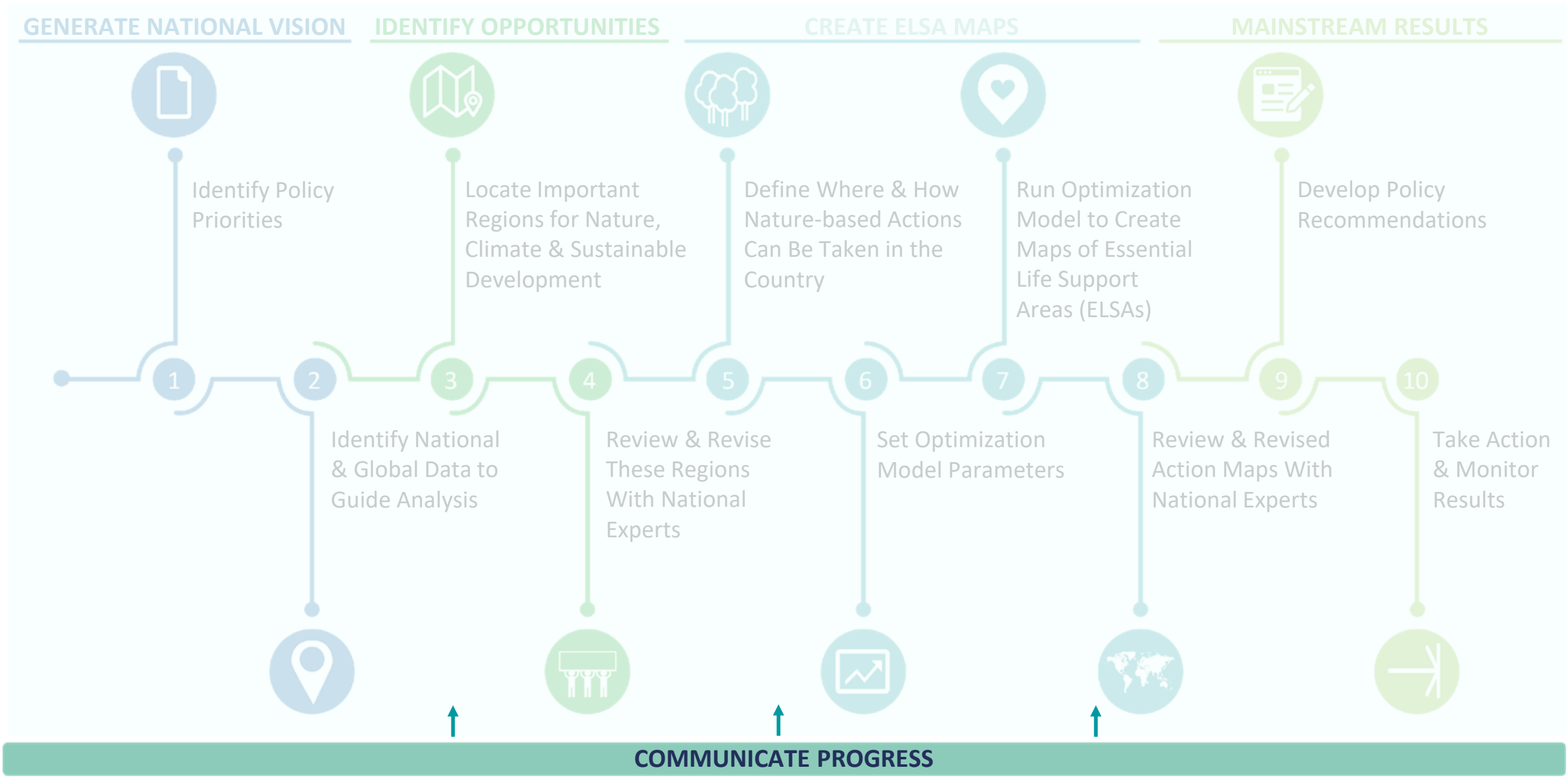
MAINSTREAM RESULTS

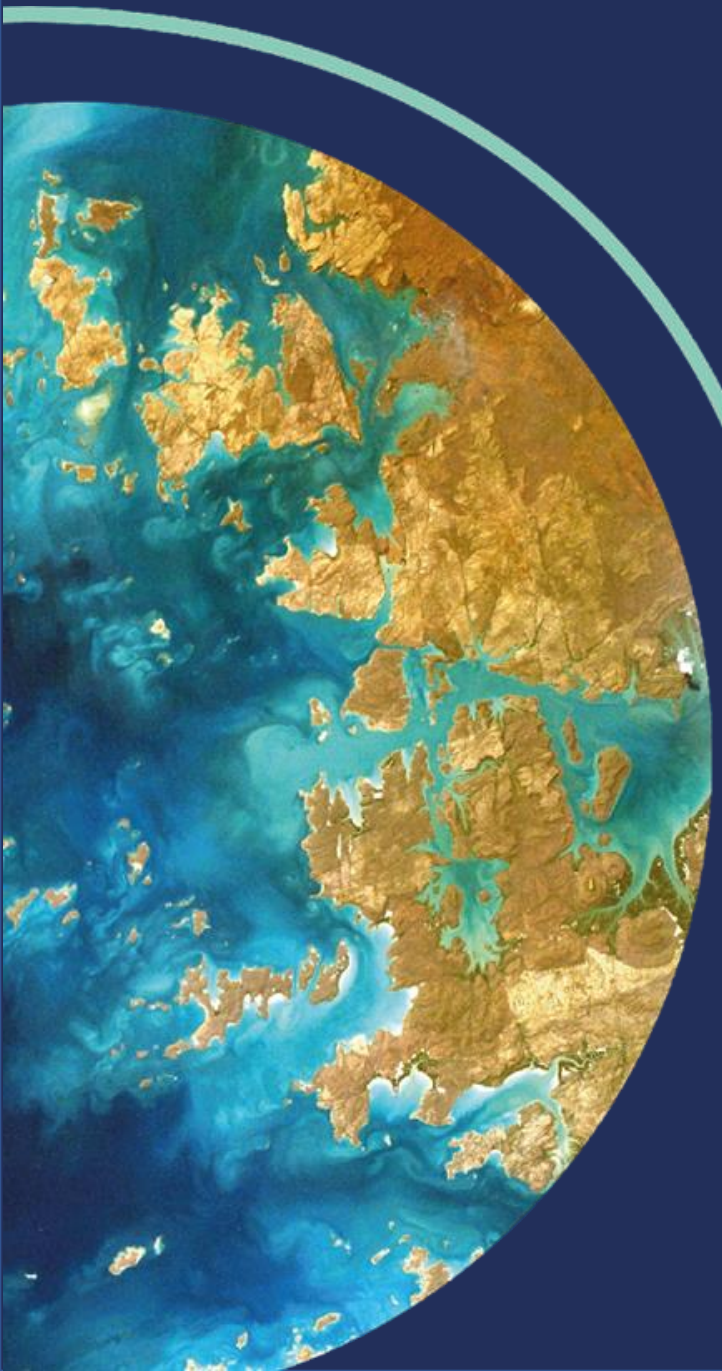


Step 10: Take Action and Monitor Results

- Engage in **cross-sectoral coordination** to apply policy recommendations and mainstream project results
- **Monitor targets** through dynamic indicators
- **Iterate** upon ELSA maps and related policies based on results

Mapping Essential Life Support Areas





Thank you!

Nokutula Mhene