ECOSYSTEM RESTORATION | Case studies towards implementation

Context
The Strengthening Community Resilience in Somali Region, Ethiopia (CERSIE) case study area is located in the Eastern Zone of the Somali Region, Ethiopia. The project aims to restore and protect the natural resources in the region, focusing on community-based conservation and sustainable land management. This page contains Case Studies that illustrate the implementation of these strategies.

Case 1: Conservation practices on weak soils

- **Main challenges**: Higher erosion, vulnerable soils, and damaged natural vegetation.
- **Recommended types of interventions**: SWC measures for slopes with weak soils and to control wind erosion. Use of invasive species as fuel, mulch, or compost.
- **Expected results**: Improved soil structure, nutrient retention, and erosion control.

Case 2: Representing severely eroded lands

- **Main challenges**: Soil erosion, stabilized by invasive species in the Eastern Zone, and severe gully erosion.
- **Recommended types of interventions**: SWC measures on gullies, stabilization of soil erosion, and regrowth of vegetation.
- **Expected results**: Reduced soil erosion, improved soil fertility, and natural vegetation recovery.

Case 3: Good agricultural practices on slopes

- **Main challenges**: Soil erosion, deposited on gullies and seasonal rivers.
- **Recommended types of interventions**: SWC to control wind erosion. Establishment of farmer field schools, and setting up of extension activities.
- **Expected results**: Improved soil structure, increased crop yields, and reduced erosion.

Case 4: Water reservoirs for integrated development

- **Main challenges**: Inaccurate water levels, and upstream flooding.
- **Recommended types of interventions**: SWC measures for slopes. SWC to control wind erosion. Better management, and support for indigenous knowledge systems.
- **Expected results**: Improved water management, increased crop yields, and reduced erosion.

Case 5: Recovering wetlands’ ecosystem services

- **Main challenges**: Loss of native species, and biodiversity degradation.
- **Recommended types of interventions**: SWC measures for slopes. SWC to control wind erosion. Better management, and support for indigenous knowledge systems.
- **Expected results**: Improved biodiversity, increased crop yields, and reduced erosion.

Table 1: Legend to the ecosystem restoration suitability map showing the recommended types of ecosystem restoration interventions

<table>
<thead>
<tr>
<th>Suitability Zone</th>
<th>Recommended Types of Interventions</th>
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</thead>
<tbody>
<tr>
<td>W1a</td>
<td>SWC measures for slopes.</td>
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<tr>
<td>W2a</td>
<td>SWC to control wind erosion.</td>
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<td>W3</td>
<td>SWC measures for slopes.</td>
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<tr>
<td>B1</td>
<td>SWC to control wind erosion.</td>
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<tr>
<td>B2</td>
<td>SWC to control wind erosion.</td>
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<td>E1</td>
<td>SWC to control wind erosion.</td>
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<tr>
<td>F1</td>
<td>SWC to control wind erosion.</td>
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<tr>
<td>R1</td>
<td>SWC to control wind erosion.</td>
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<td>R2</td>
<td>SWC to control wind erosion.</td>
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<td>R3</td>
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<td>R4</td>
<td>SWC to control wind erosion.</td>
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<td>A1</td>
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<td>A5</td>
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<tr>
<td>A6</td>
<td>SWC to control wind erosion.</td>
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</tbody>
</table>

Key:
- **W**: Wetlands
- **F**: Forests
- **R**: Rangelands
- **A**: Agriculture

This map shows the suitability zones for ecosystem restoration interventions and highlights the areas where these interventions are recommended. The map is a tool to guide the implementation of conservation practices and sustainable land management strategies in the case study area.