

# Sheep and Beef data

## Project Team

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*Healthy environment*

*Strong economy*

*Vibrant communities*

# Outline

**The research process**

**Illustrative results**

**Some policy implications**

**Concluding remarks**

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# Data collection

## Case studies

- ❖ 450 Farms – surveyed to study pugging/flooding mgt
  - 170 Farms – allowed follow up questions
    - 20 farms – spatially selected
      - 13 farms – interviewed
        - ✓ 12 farms – full data
          - ✓ Focus Group discuss/Workshop

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# 5 farm types/systems...

1. Small lamb finishing farm
2. Traditional Hill country farm
3. Hill country/dairy support (maize silage cropping)
4. Hill country/dairy support (pasture silage)
5. Bull & prime beef finishing farm


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# Choice of mitigation options



## Menu

Practices to improve water quality

*Drystock farms*



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# Scenario analysis...

## FARMAX modelling

### Biological feasibility

## OVERSEER modelling

### Nutrient budgets

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# Illustrative case study farms

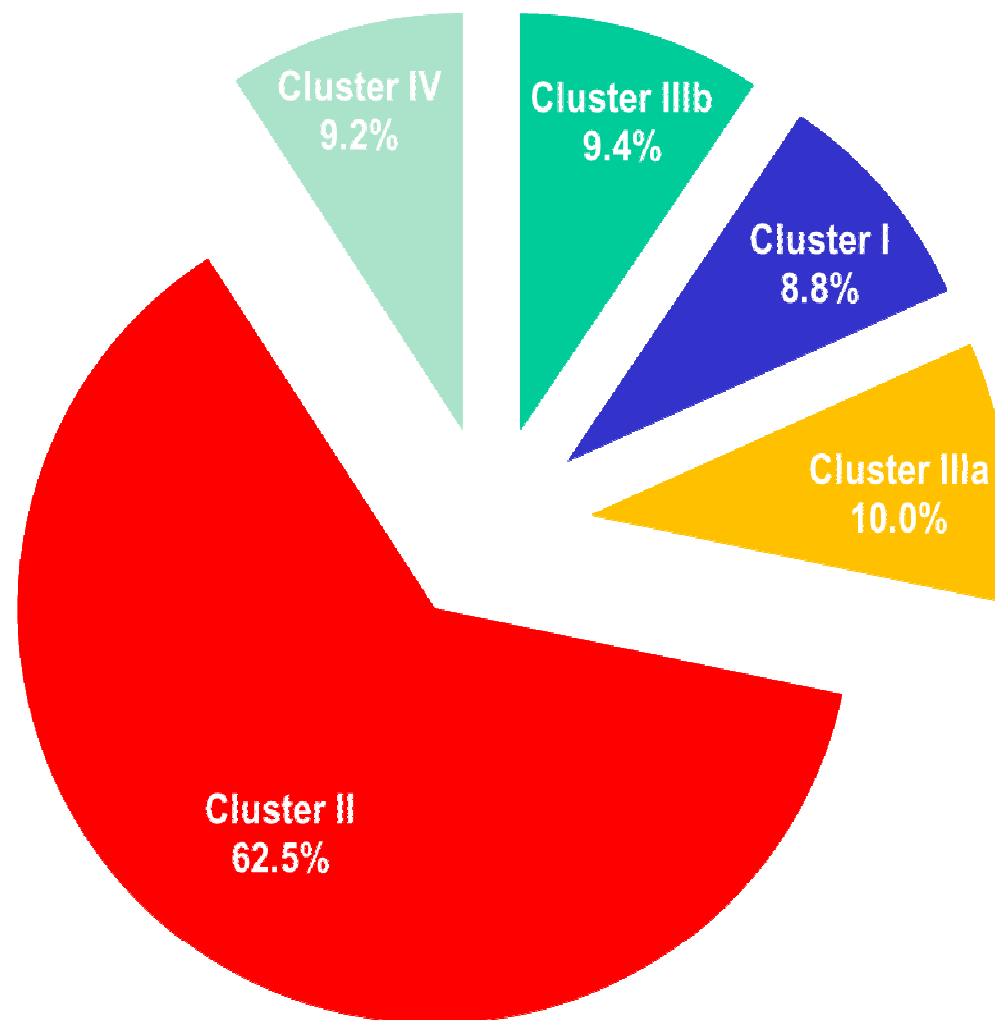
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## Effective area proportion by cluster



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# Case study II

Description	Ave. N used (kg/ha/yr)	Mitigation option	Scenarios
<p>Traditional hill country</p> <ul style="list-style-type: none"> <li>• <b>Steep slope - 10% of area</b></li> <li>• Large farm size: Ave. 475ha</li> <li>• High sheep ratio: 70%</li> <li>• Low stocking rate: 8.5SU/ha</li> </ul>	0.5	Plant steep slope in trees	<p>Baseline: <b>3%</b></p> <p>Scenarios</p> <ul style="list-style-type: none"> <li>▪ 20%</li> <li>▪ 40%</li> <li>▪ 60%</li> <li>▪ 80%</li> <li>▪ 100%</li> </ul>

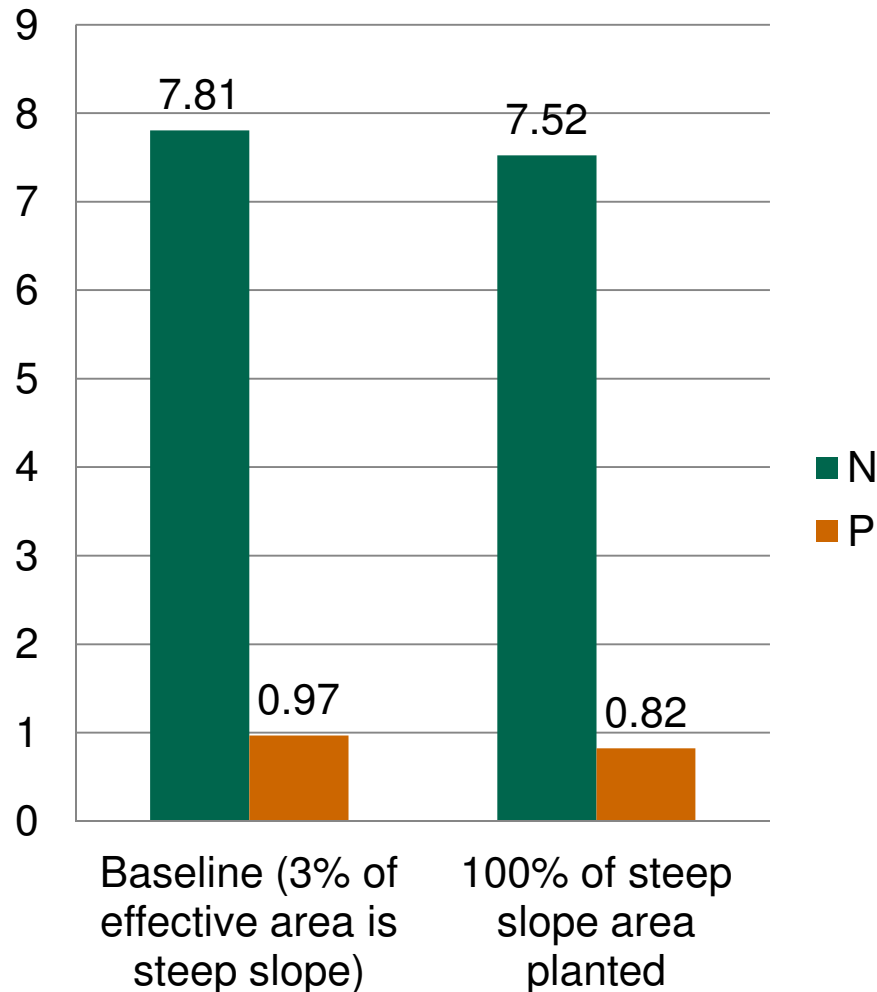
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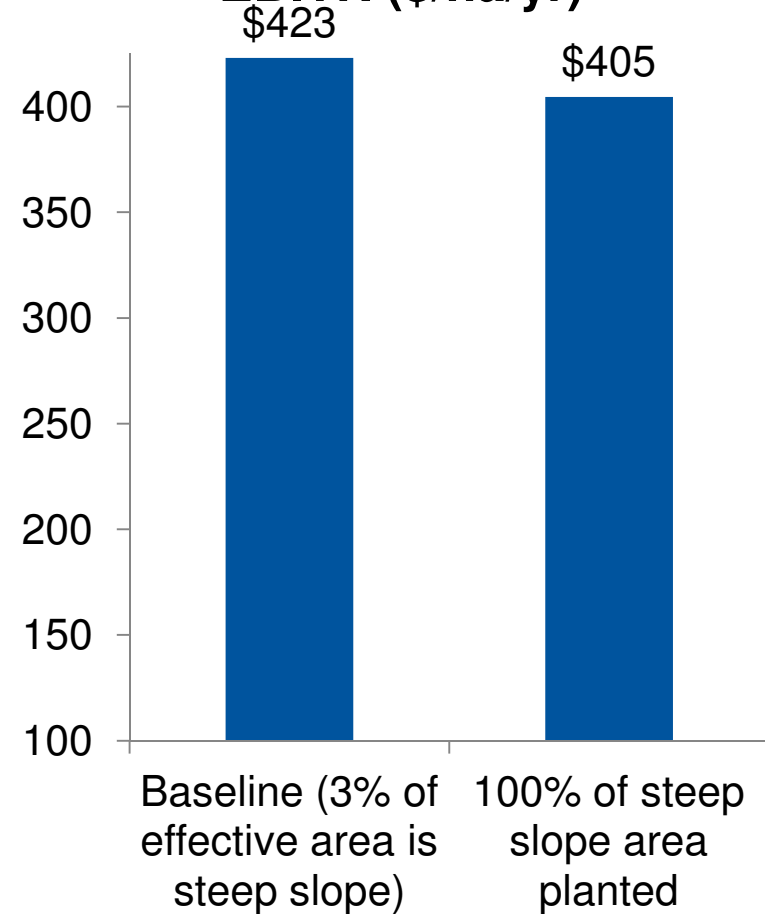
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# Case study II

### Nutrient loss (kg/ha/yr)



### EBITR (\$/ha/yr)



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# Case study IIIa

Description	Ave. N used (kg/ha/yr)	Mitigation option	Scenarios
<p>Hill country, dairy support on maize silage cropping</p> <ul style="list-style-type: none"> <li>• <b>Cropping: 70% of eff. Area</b></li> <li>• High cattle ratio: 100%</li> <li>• High female cattle ratio: 80%</li> <li>• Low stocking rate: 8.6SU/ha</li> <li>• Beef breeding</li> </ul>	125	Reduce are of maize silage cropping	<p>Baseline: 70% of Area</p> <p>Scenarios:</p> <ul style="list-style-type: none"> <li>▪ 20%</li> <li>▪ 40%</li> <li>▪ 60%</li> <li>▪ 80%</li> <li>▪ 100%</li> </ul>

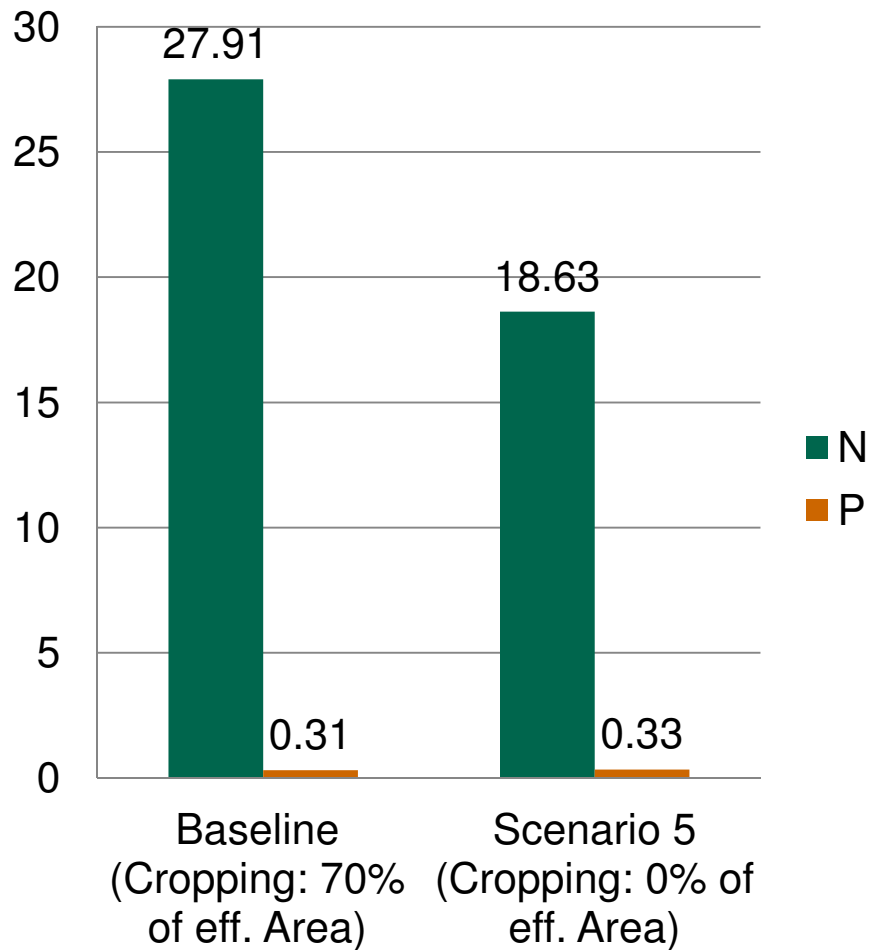
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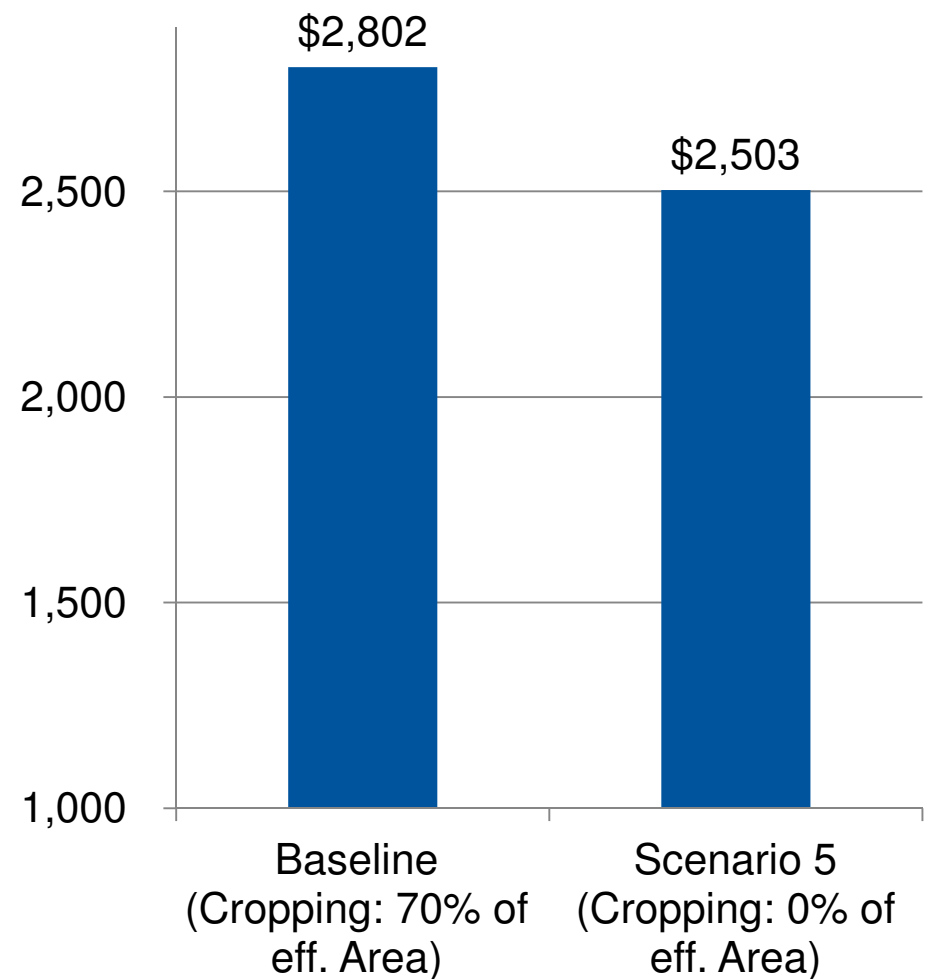
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# Case study IIIa

### Nutrient loss (kg/ha/yr)



### EBITR (\$/ha/yr)



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