

# Benefits distribution



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- **Users perceiving more benefits:**  
more educated, wealthier, with greater environmental awareness, local leaders, live in smaller community, and young
- **Key considerations:**
  1. Group members (& the educated) will have influence on governance of distribution
  2. Poor households perceive the least benefits
  3. Small communities' disadvantaged in access and insecure source ownership

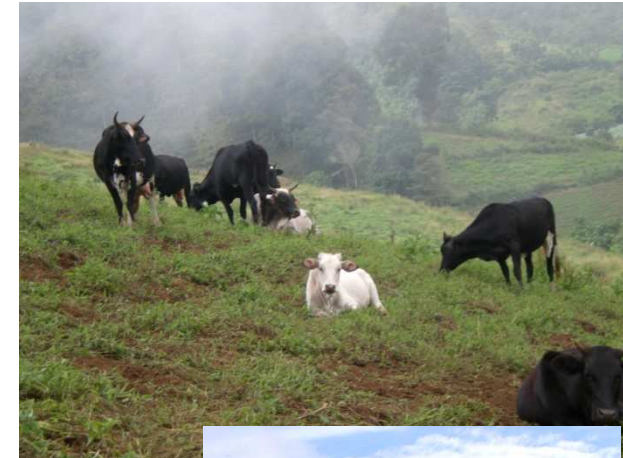


# Opportunity Costs



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- Vegetables, coffee, cattle, maize and beans, forest natural resources, rent
- 62 surveys
- Socioeconomic questions



## Average provider characteristics

- 56 years old, 98% male
- 4 years of education, family size 5
- 2.5 hh incomes, 75% income from farmer
- 1.5 productive land uses
- 100% secure land tenure

1 manzana= 0.7 ha

## Average land characteristics

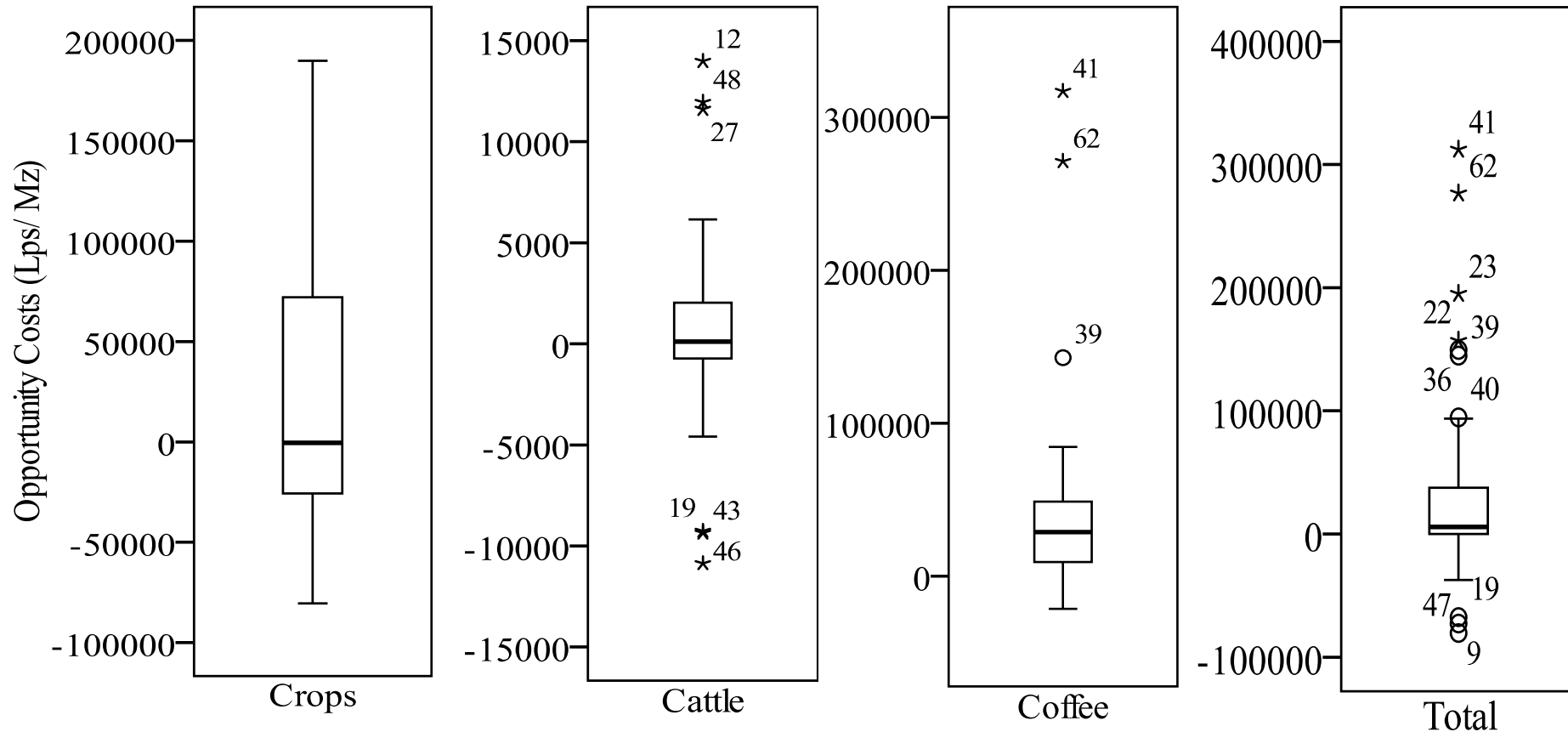
- 21 mz per farmer, range 1-180
- 1.6 plots, range 1-4
- 39% forest (range 0-92.5), 35% cattle (range 0-100)
- 8% coffee ( range 0-8), 3% crops (range 0-6)
- 6% rented, 5% loaned, 4% fallow



# OC Estimates



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Median 5,640 Lps/Mz/yr = US\$ 389/ha/yr  
 Mean 30,444 Lps/mz = US\$ 2,094/ha/yr

**Total study site**  
 US\$ 722,603 /yr

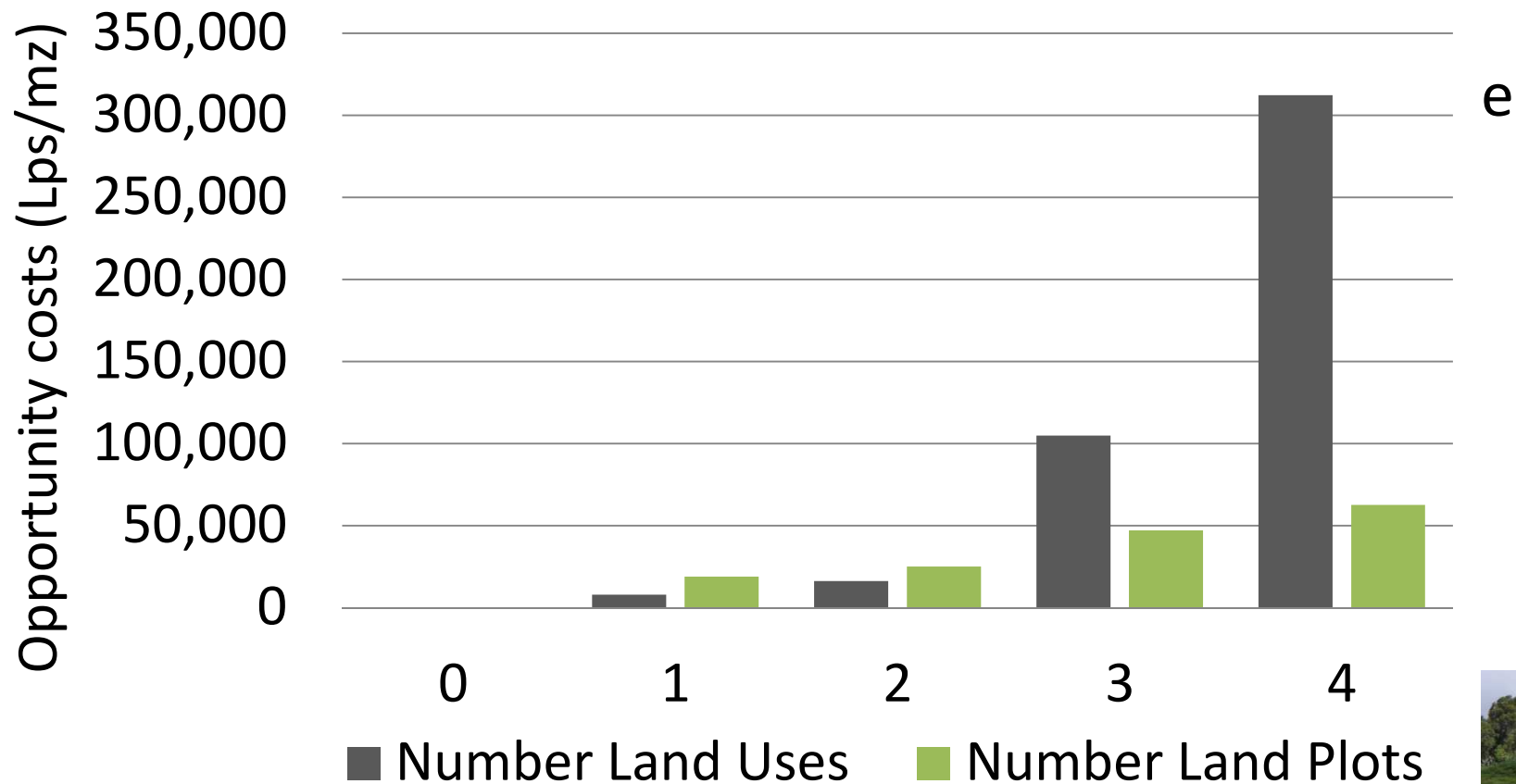


# Costs distribution



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- High opportunity cost earners:



# Conclusions & PES considerations (1)



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1. The explanatory factors of cost-benefit distribution are context specific, so each case needs to be assessed individually.
2. Benefits only cover 2% of productive land and even less if we consider potential deforestation, thus a scheme with external support and bundled services is more realistic.
3. Differentiated payment by beneficiaries are needed to ensure the poor are not negatively impacted (in each community).



5. Targeting of payments should be focused on high additionality areas, i.e. the productive land near water sources which don't have secure land tenure and high levels of contamination.
6. Flexible payments are more cost-effective and equitable, allowing the conservation of more land (cattle) and spreading resources (smallholders).
7. Landowners are more willing to set-aside land for conservation than selling land, but it might open up more land for extractive activities.



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FIRS scholarship, University of Leeds;  
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**Thank you!**