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Landcare Research

Economic Analysis

Introduction

Motivation

- Policy makers are wary of spending money inefficiently
- There is a growing focus on gathering more evidence about what “works”

Motivation

I have all this evidence from rigorous studies!
Program X will
improve primary school enrollment
in your country

Motivation

I have all this evidence from rigorous studies!
Program X will
boost agricultural productivity
in your country

Motivation

I have all this evidence from rigorous studies!
Program X will
reduce spending on emergency care
in your country

Motivation

I have all this evidence from rigorous studies!
Program X will
reduce mortality rates from pollution
in your country

Motivation

I have all this evidence from rigorous studies!
Program X will
protect native habitats
in your country

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Um, great… But what will this all cost me?

Skeptical policy maker

Policy analysis

I have all this evidence from rigorous studies!
Program X will
protect native habitats
in your country

Hang on! Not just you! How much is it going to cost *us*?

Skeptical policy maker

Um, great… But what will this all cost me?

Economic analysis in decision making

- Objectivity
  - Takes a community-wide or multi-stakeholder perspective
  - Highlights trade-offs involved in different kinds of investments
- Inclusiveness
  - Allows the consideration of a range of policy options
- Emphasises efficiency
  - Answers whether a project should be undertaken at all?
  - If so, determines which policy projects are A) most effective and B) most efficient
- Transparency and accountability
  - Can account for risk and uncertainty
  - Using a consistent metric helps to set priorities

Increasing school attendance in Africa

Merit scholarships for girls, Kenya

Conditional cash transfers for girls, avg. Malawi

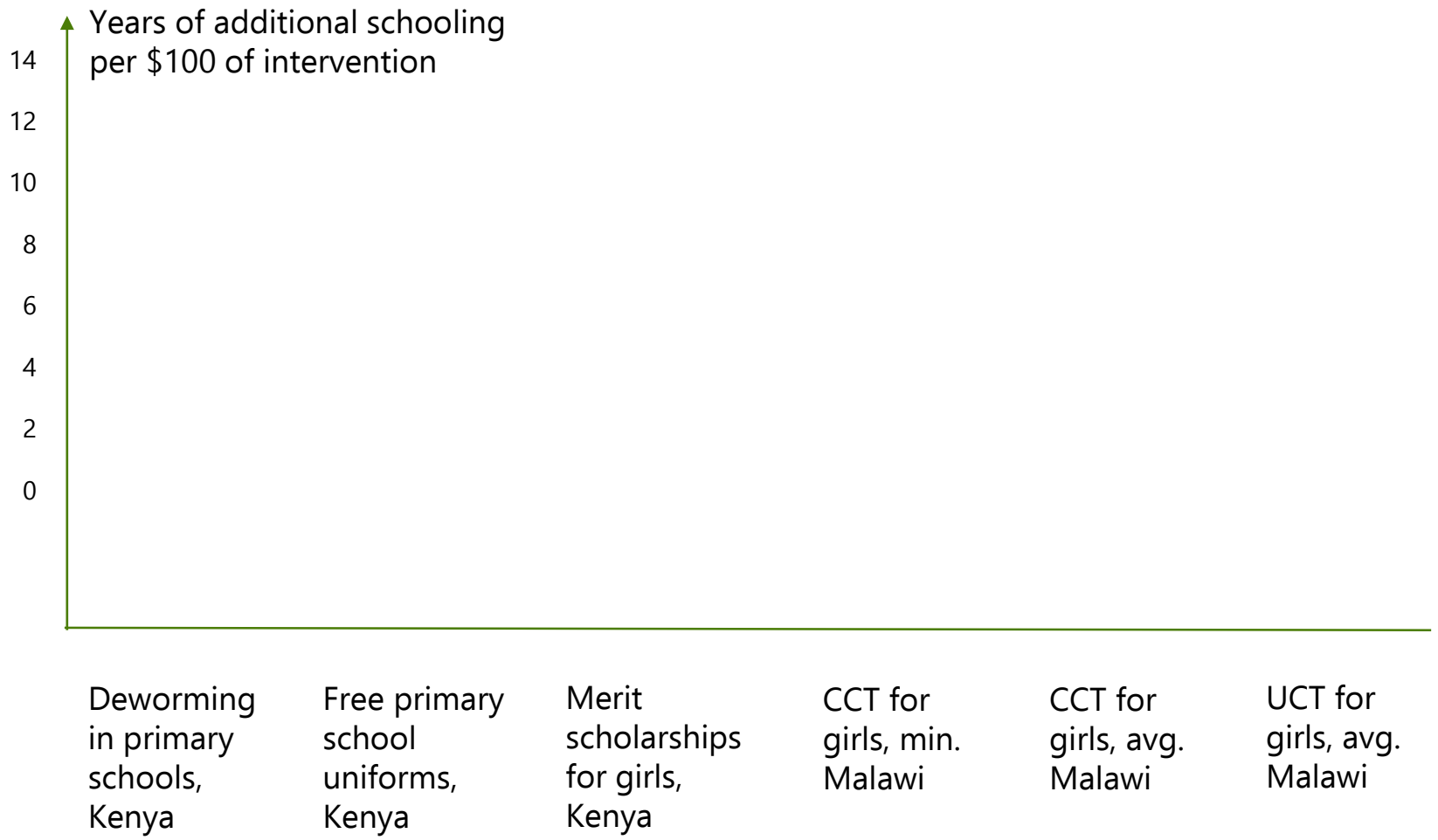
Free primary school uniforms, Kenya

Conditional cash transfers for girls, min. Malawi

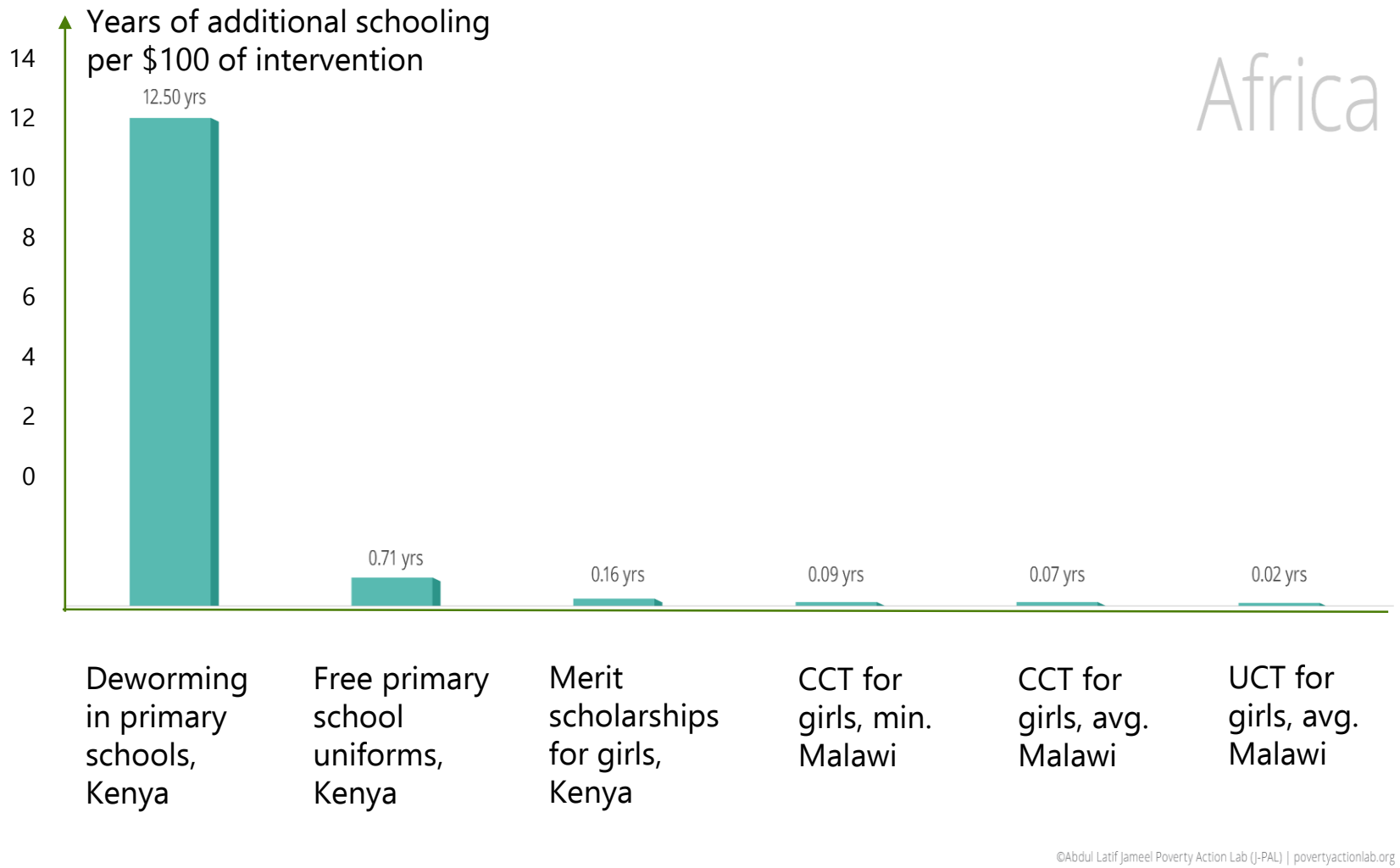
Unconditional cash transfers for girls, avg. Malawi

Deworming in primary schools, Kenya

Increasing school attendance in Africa



Increasing school attendance in Africa



Economic analysis in decision making

- To avoid investing in a solution before identifying the problem and all possible remedies across contexts and time periods → *to avoid ad-hoc solutions*
- To determine proper resource allocation with a constrained budget → *to set priorities*
- To rule out projects in which the costs exceed the benefits → *to avoid intervening when it's not worth it*
- To identify priorities across multiple projects → *to spend stakeholder money wisely*
- Summarize complex program impacts parsimoniously → *to present information clearly*

NOTE: Decisions are typically not made solely on the basis of economic analyses, but they can be a useful tool to aid the decision-making process

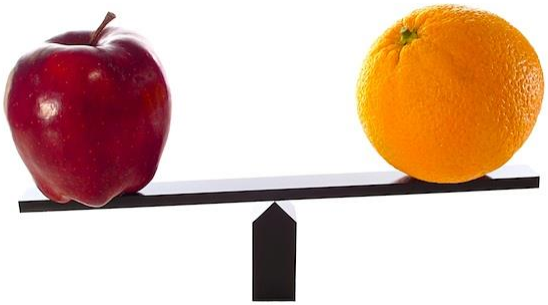
Typical benefits of managing IAS

- Avoided costs - the value of inputs or lost outputs which would have been incurred in the absence of an intervention

  Avoided infrastructure damage

- Productivity savings - reductions in existing levels of input expenditure which can be shown to result from the project

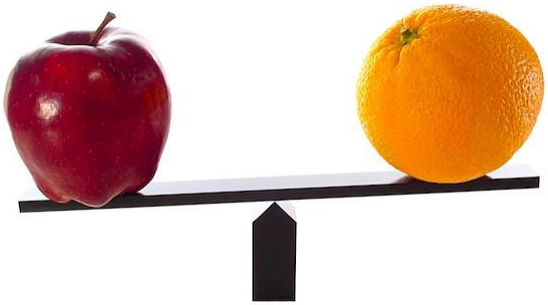
  Higher agricultural productivity



Typical benefits of managing IAS

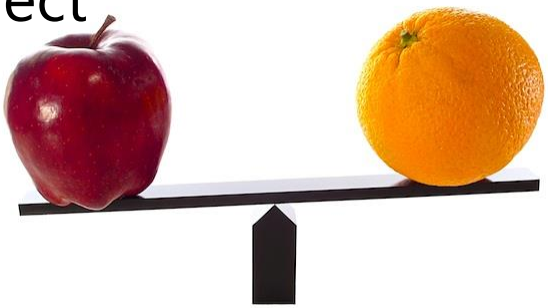
- Positive health and social impacts resulting from the project
  - Increased leisure time
  - Preserved traditional ecological knowledge

- Positive environmental impacts resulting from the project
  - Natural food harvesting
  - Protected biodiversity



Typical costs of managing IAS

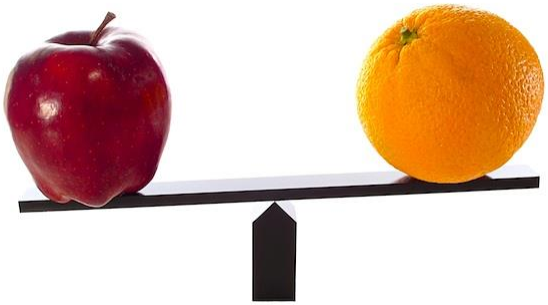
- Research, design, and development costs
- Capital expenditures
  - Machinery
  - Control agents
- Labour costs
- Operating and maintenance costs for the entire expected economic life of the project



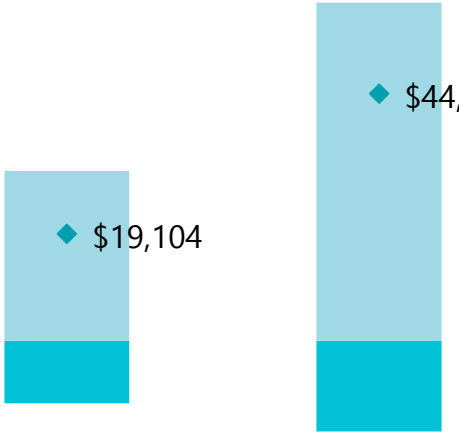
Typical costs of managing IAS

- Negative externalities
  - health outcomes/impacts on third parties
  - environmental impacts on third parties

- Lost benefits associated with controlling/removing the IAS
  - Consumption for food
  - Building materials



Economic feasibility vs. Financial feasibility



Economic feasibility	**Financial feasibility**
Net values	Profits
Benefits and costs	Revenues and $ costs
Social impacts	Monetary impacts
Environmental impacts	
Distributional impacts	
… etc.	
All community groups	Groups that pay or earn money

Where to draw the line with an economic analysis…

- The **cost** of doing the analysis should be small relative to the cost of the project itself
- Some values are not worth capturing because they are either **too small** or **difficult to measure** or **expensive to measure**

If valuing these things is absolutely required, what can be done?

- **Combine data** collection with other initiatives
- **Focus on physical units** rather than monetisation
- **Borrow values** from elsewhere (cautiously)