

The Dismal Science Meets a Global Atrocity

Intersessional Meetings

Geneva - 8 May 2001
Ted Paterson

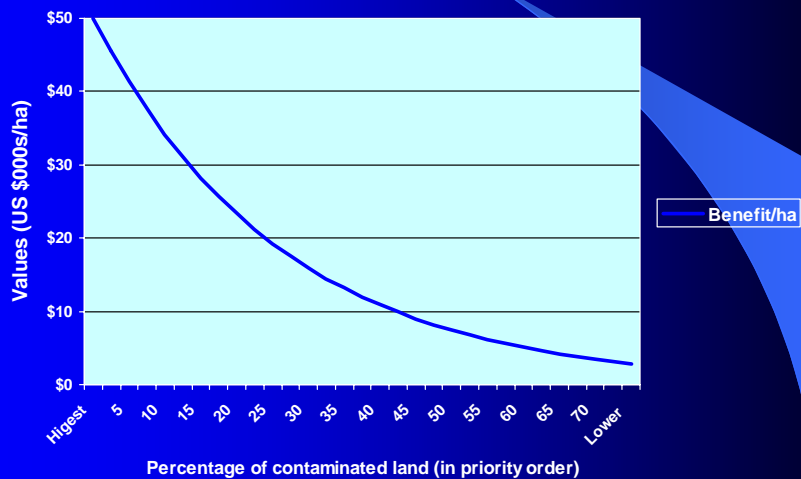
How does an economist approach mine
action?

That's fine in reality, but will it
work in theory?

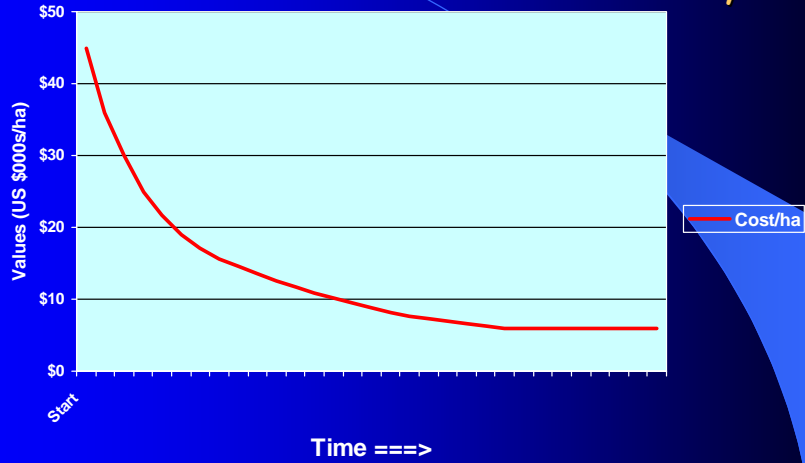
Objectives

- Present the 'Stylized Facts' of a mine clearance programme - What we think we know.
- Lessons (being) learned
- Review the 'Harris Fallacy'

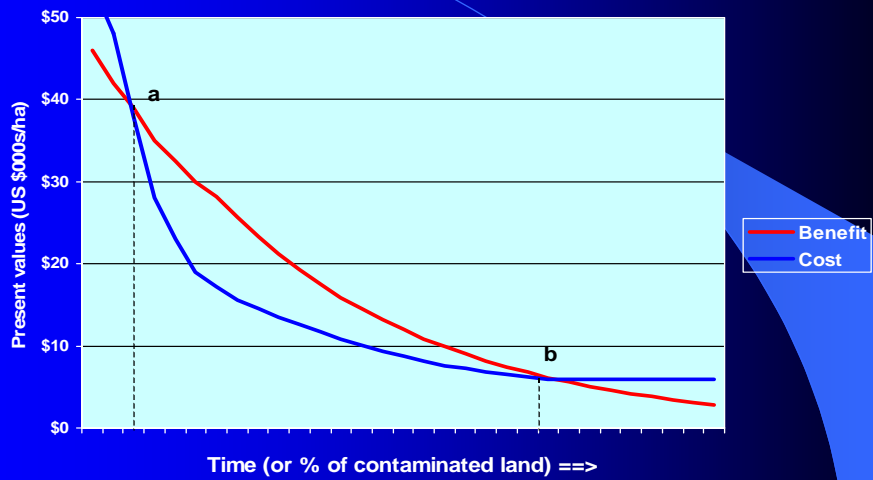
Depicting Benefits of Mine Clearance



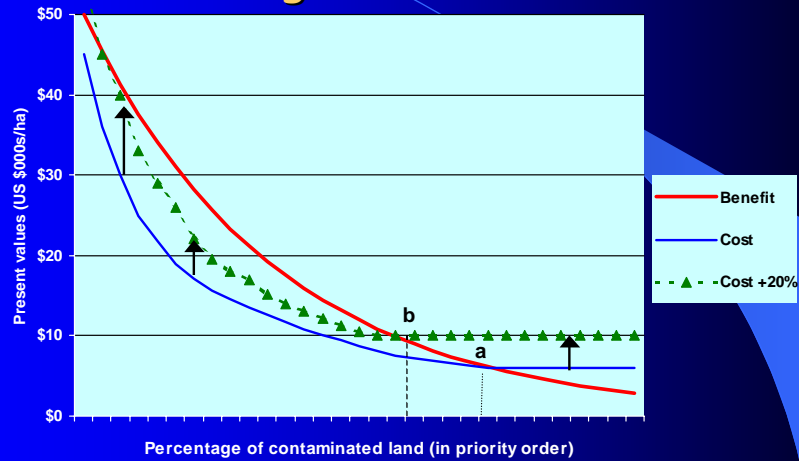
Costs of Mine Clearance in a Country



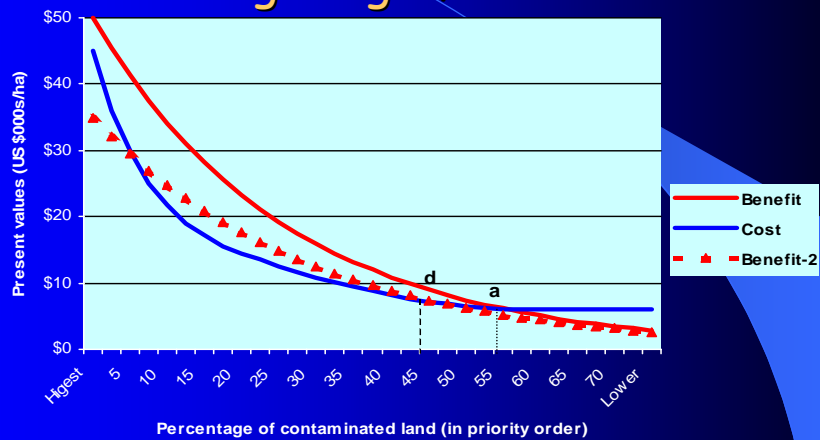
Basic Graph 1 (Unit Costs & Benefits)



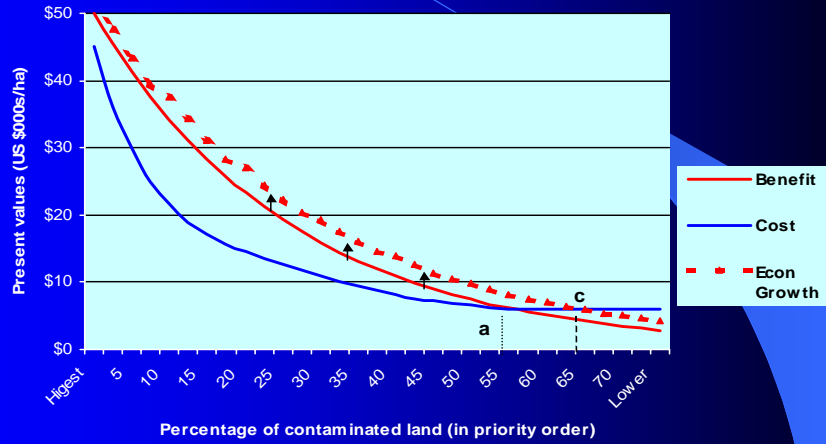
Effect of Higher Clearance Costs



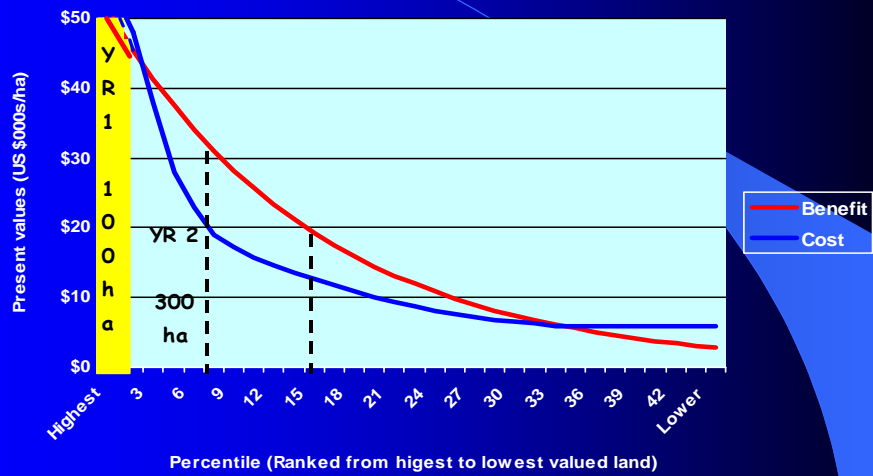
Poor Targeting of Clearance



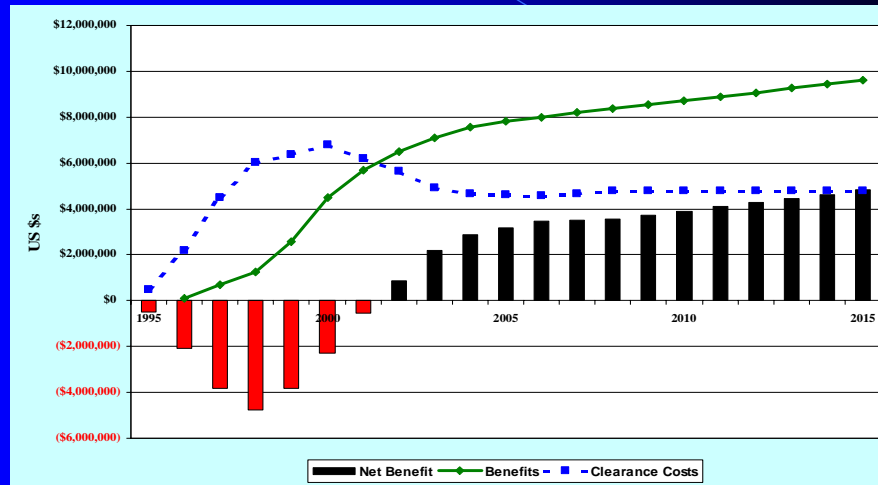
Effects of Faster Economic Growth



Displaying multiplication on the graph...



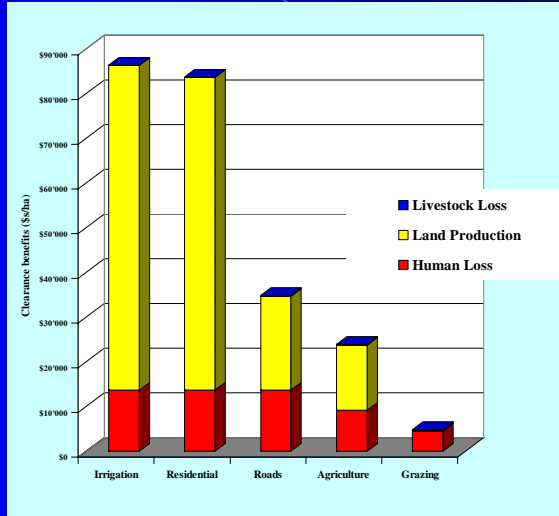
Basic Graph 2: Depicting Total & Net Costs & Benefits



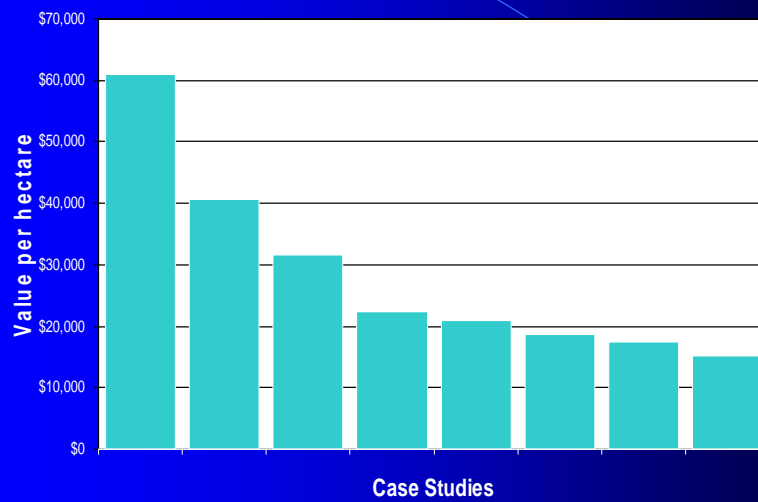
Introducing Realism

- Can't value each parcel of land, so...
- Do case studies

Preliminary Findings from Afghanistan



Preliminary Findings from Afghanistan Case Studies of Agricultural Land (showing benefits)



Some Preliminary Findings

- MAPA in Afghanistan now yields very high economic benefits (c. \$40 million in 1999)
- UXO LAO on the verge of shifting from net cost to net benefit.
- General clearance of agricultural land in Mozambique is not cost-effective, but more targeted clearance is, for example...
 - Clearance of village water points to free women's time for tending crops

Some Other Lessons

- Mine clearance can be evaluated using cost-benefit approaches.
- The difference between good and poor targeting of clearance is very significant
- The cost effectiveness of mine awareness is extremely difficult to assess
- Cost/managerial accounting is weak in most mine action organisations (or not shared with evaluators)

The Harris Studies

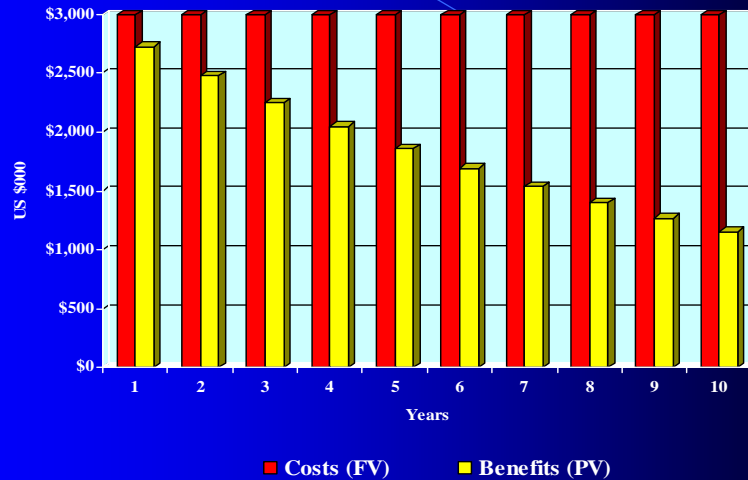
- Harris, Geoff. (2000). The Economics of Landmine Clearance: Case Study of Cambodia. *Journal of International Development*, 12(2): 219-225.
- Article on Mozambique to be published.

The Harris Fallacy

- For Cambodia, calculated net cost of minus \$3,434 million!!!! Some errors...
- Discounted future benefits but not future costs
 - total (undiscounted) costs of \$140 million/year for 25 years = \$3,500 million
 - discounted (at 10%) costs under \$1,400 million

Discounting Future Benefits but Not Costs

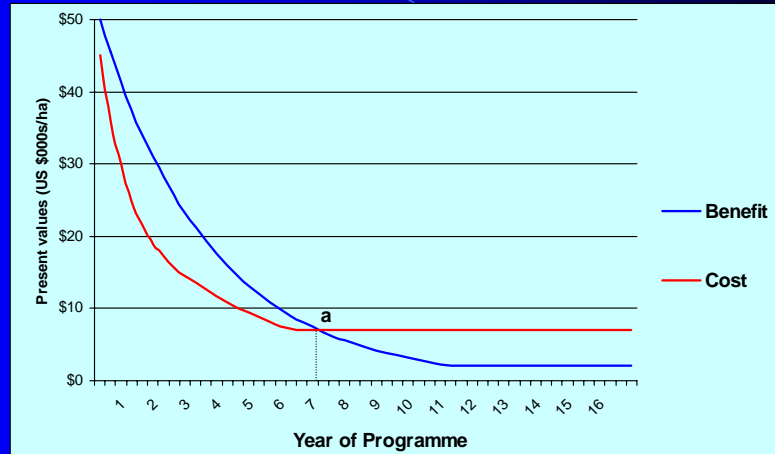
Assume Benefits & Costs of \$3,000,000 each Year



The Harris Fallacy - 2

- Overstated the size of the programme
 - \$140 million/yr rather than <\$20 million/yr
 - Modeled clearance of all contaminated land, rather than targeted clearance.

Costs & Benefits of Clearance over Time



The Harris Fallacy - 3

- Understated benefits
 - Uses wrong figure for net value of agricultural production.
 - Strategy is to clear high value land first.
 - Didn't consider future economic growth, which raises future benefits.

The End