How much farther can coffee markets take us?

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Prices paid to growers (Arabicas): nominal terms

Source: ICO, 2008

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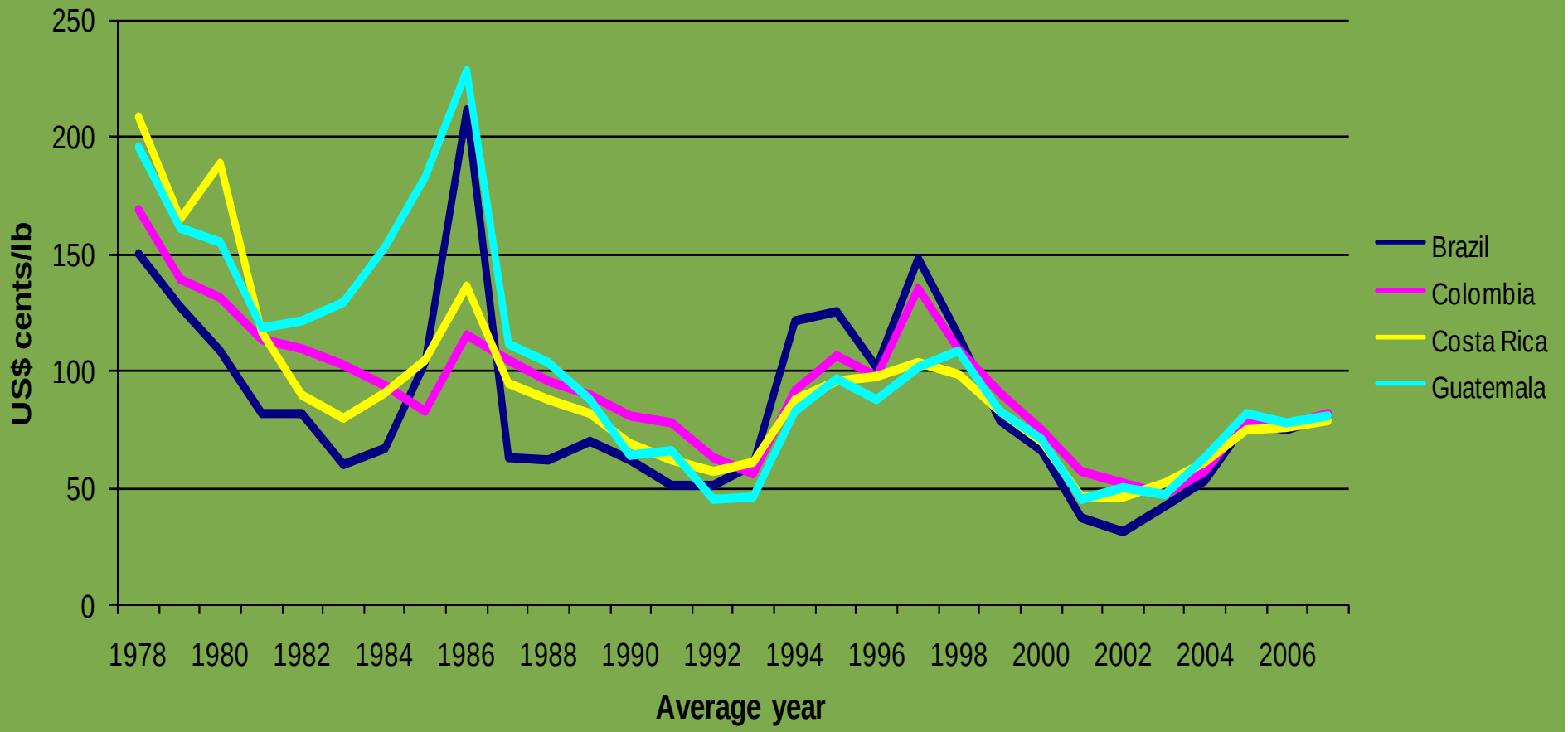
Prices paid to growers (Arabicas): real terms

Producer prices index 2000=100



Source: CIMS with data from ICO and OECD, 2008

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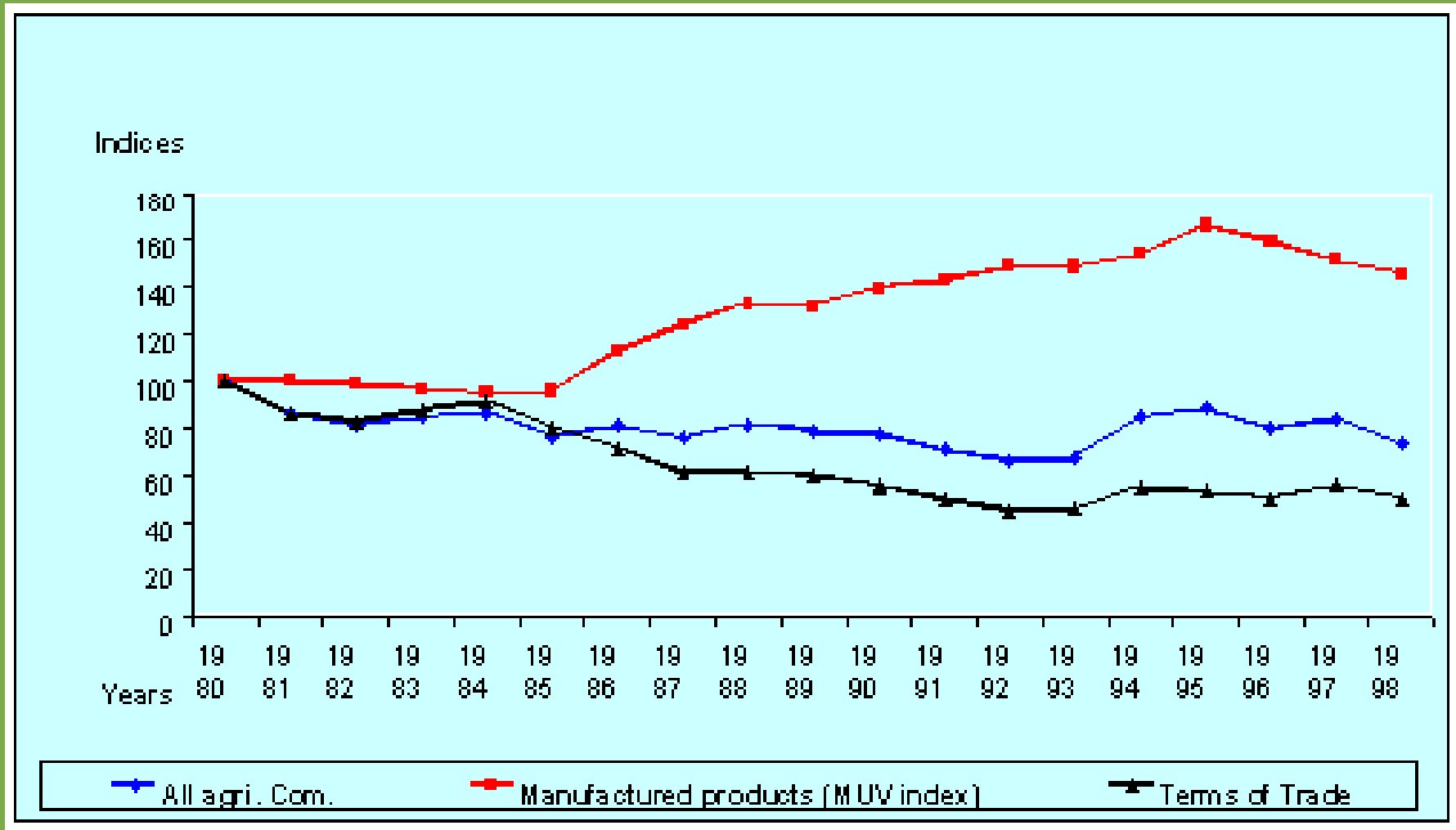
Deterioration in terms of trade



Source: FAO, 2006

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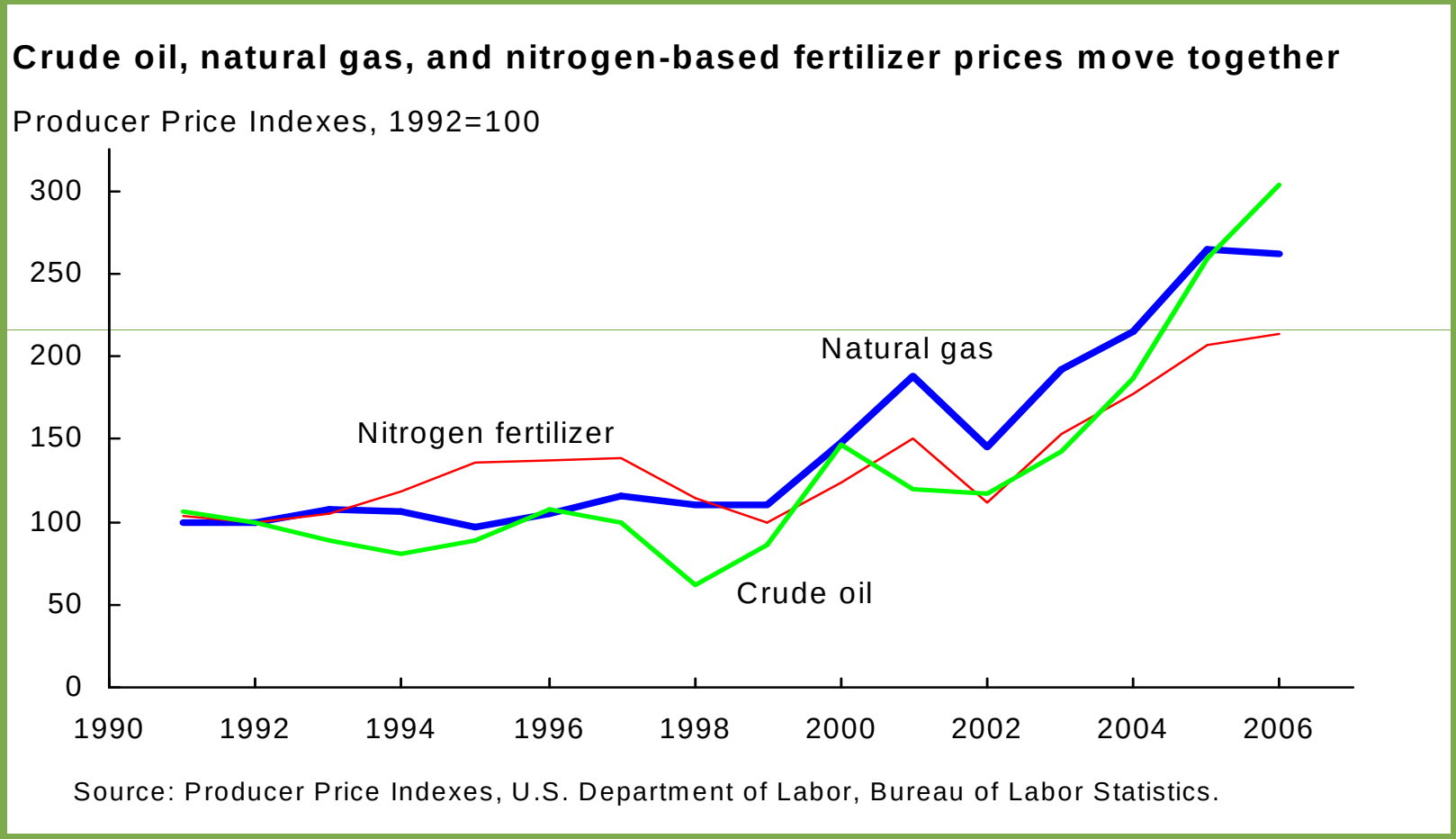
Real Costs Have Been Rising



Source: USDA Agricultural projections, 2008

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What is the future of Costa Rican coffee?

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Challenges for Coffee industry

- Price
- Costs
- Climate Change

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Coffee prices at NY BOT

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Coffee prices at NY BOT 2006 - 2008

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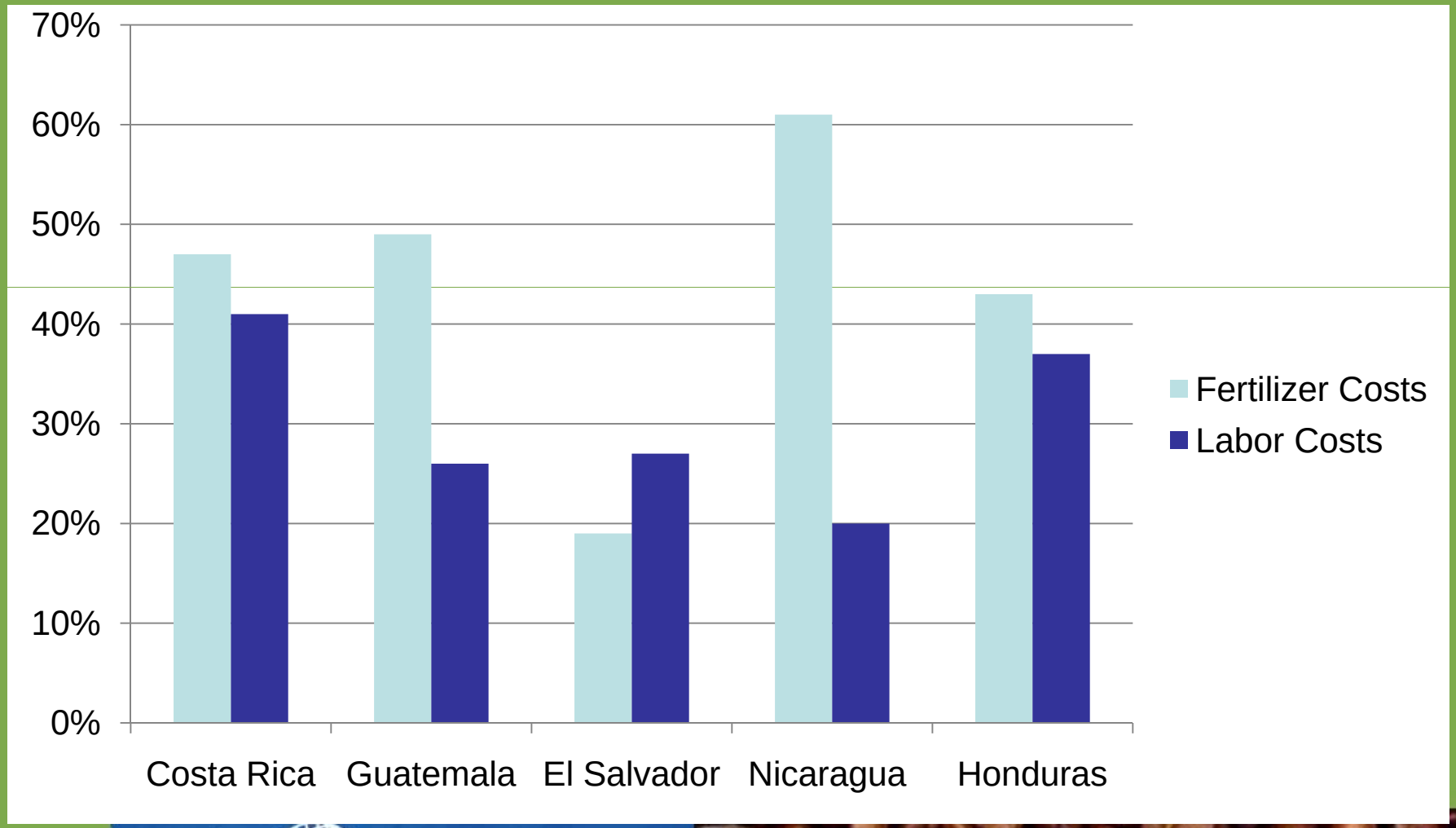
Increase of production costs between 2006 and 2008



Source: Baltodano 2008

What are the coffee production costs in Costa Rica? (2005/2006)

Farm Gate	$/qq
Labor	21
Inputs	20.3
Harvesting + transportation	26
Indirect costs	19.6
Farm Gate Sub-Total	88
Milling	
Wet + Dry mill	10.9
Mill profit	9.2
Milling Sub-Total	20.1
Total production costs 1 Quintal	108.1

Source: Icafé

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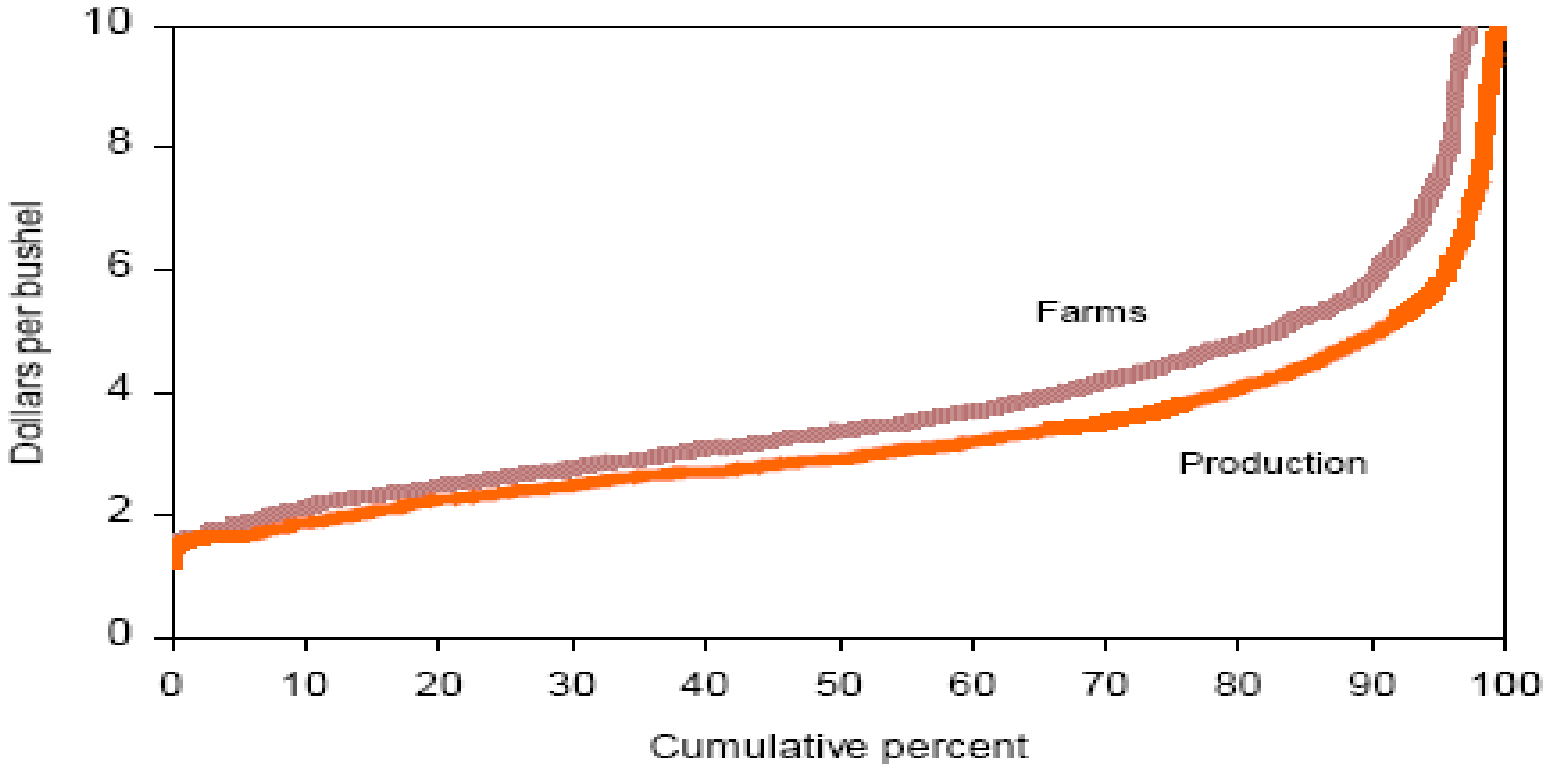
Economic information available for other crops

Cumulative distribution of soybean farms by production costs per bushel, 1997



Source: 1997 Agricultural Resource Management Survey.

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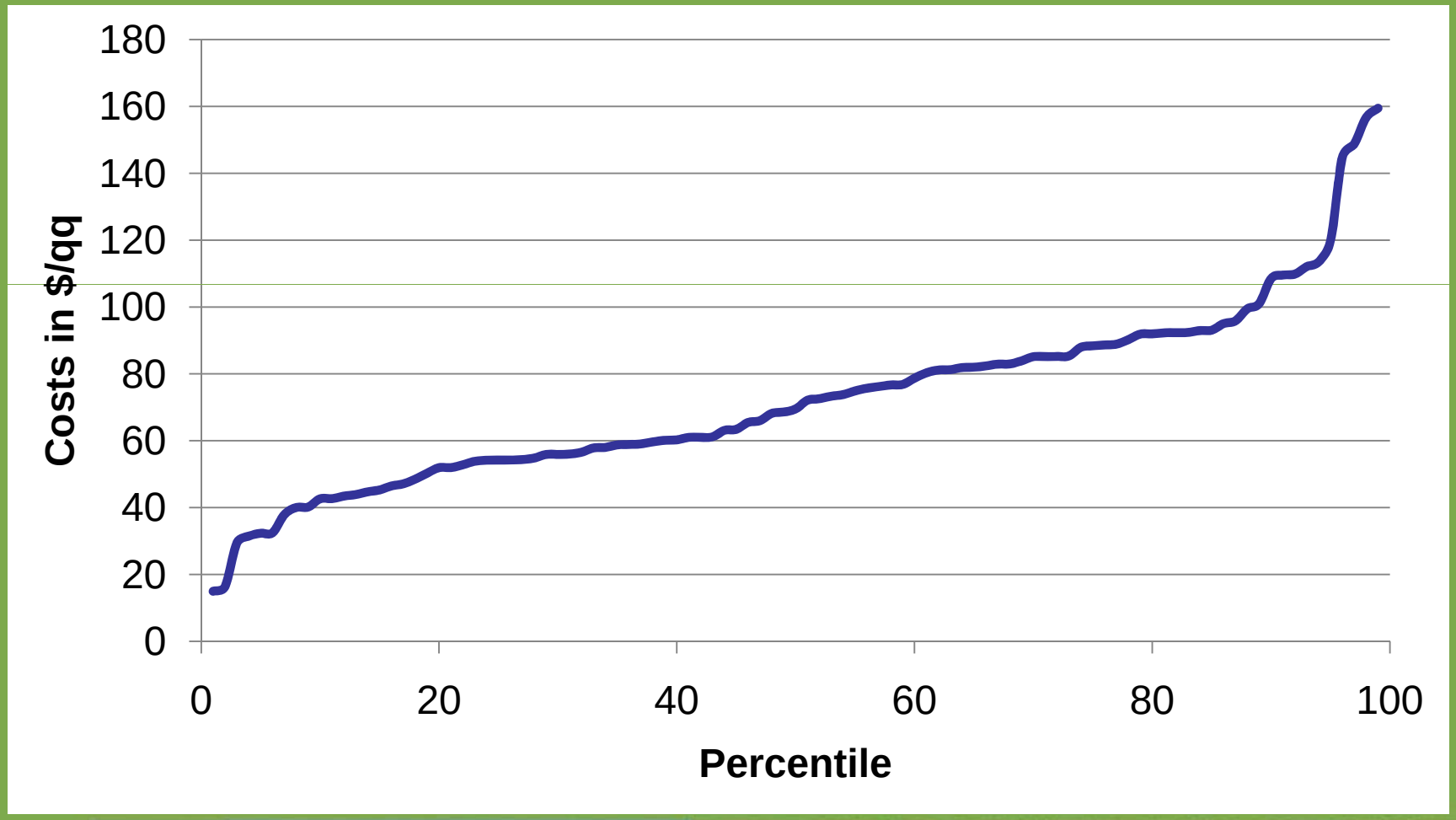
Coffee production costs of a sample of Costa Rican coffee farmers - 2008



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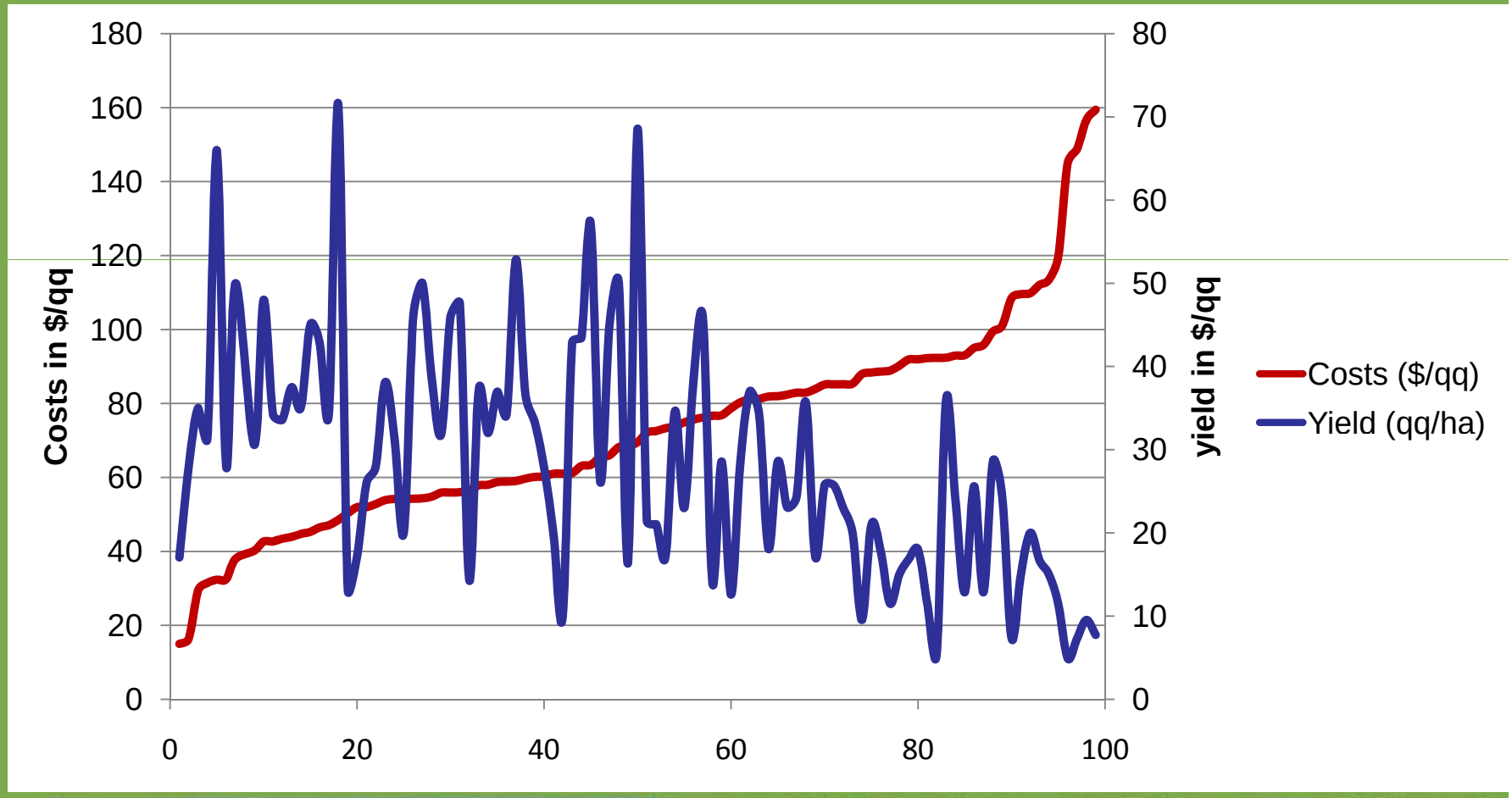
Relationship between Production Costs and Yield



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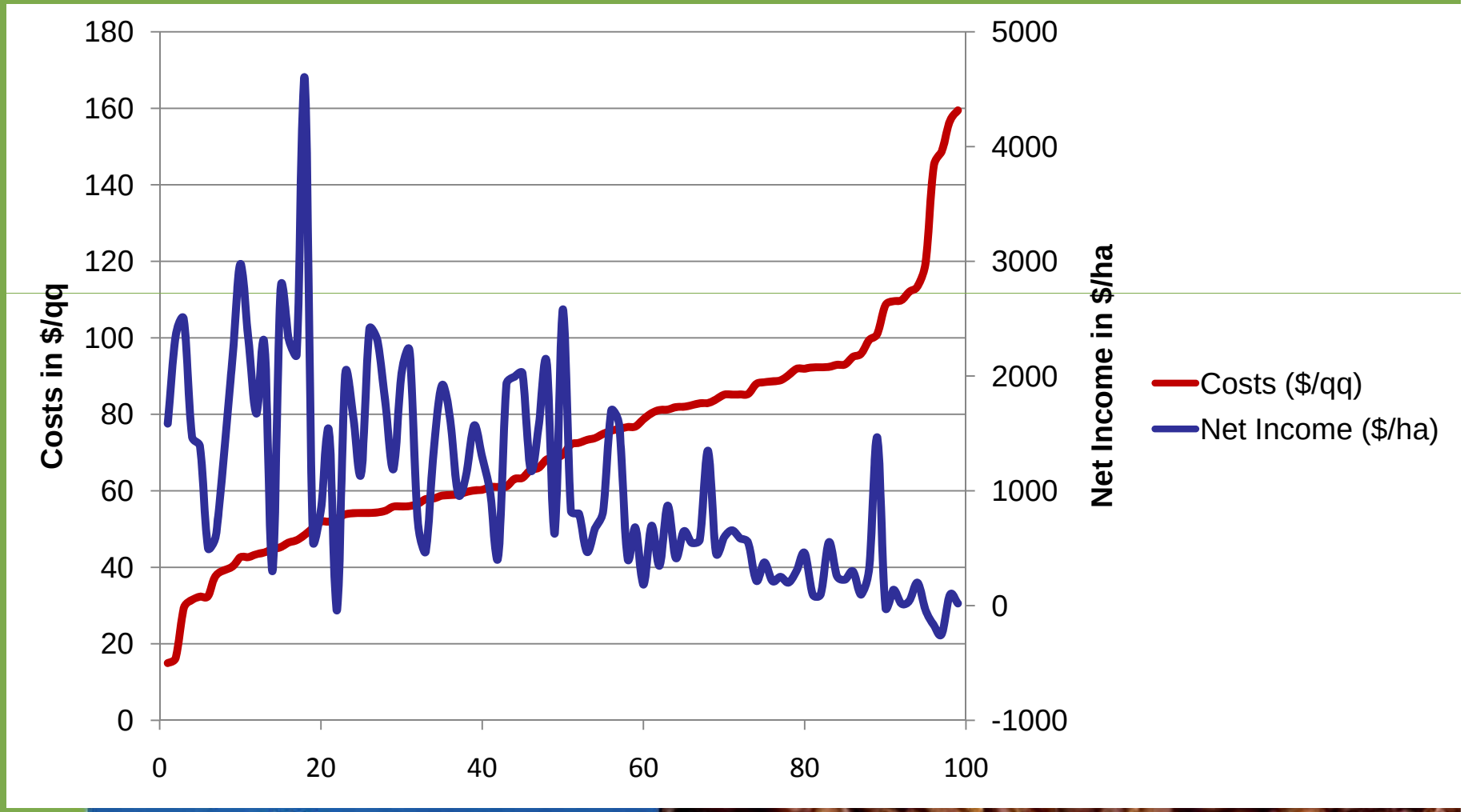
Relation between Net Income and Production costs



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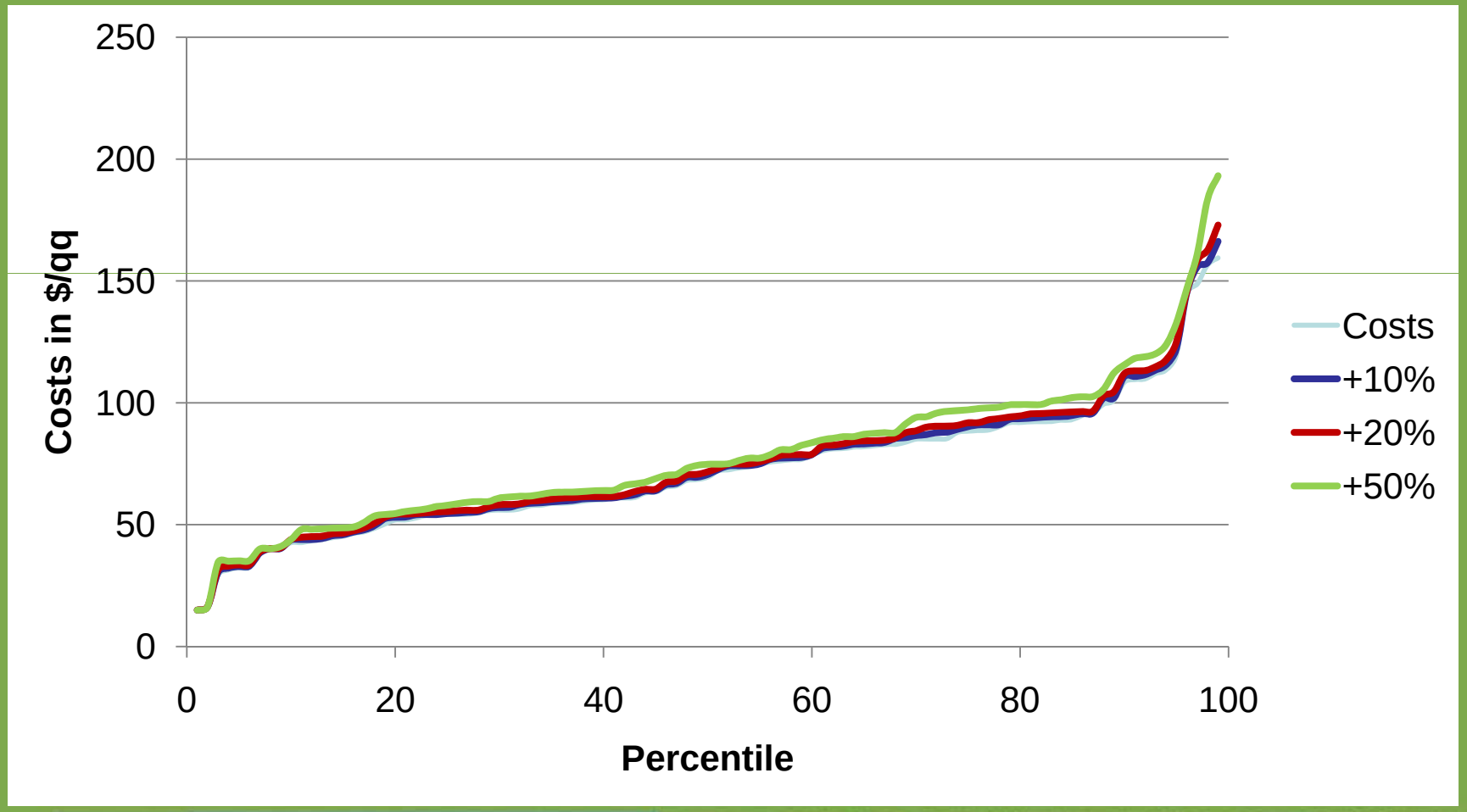
Effects of a further increase of fertilizer costs



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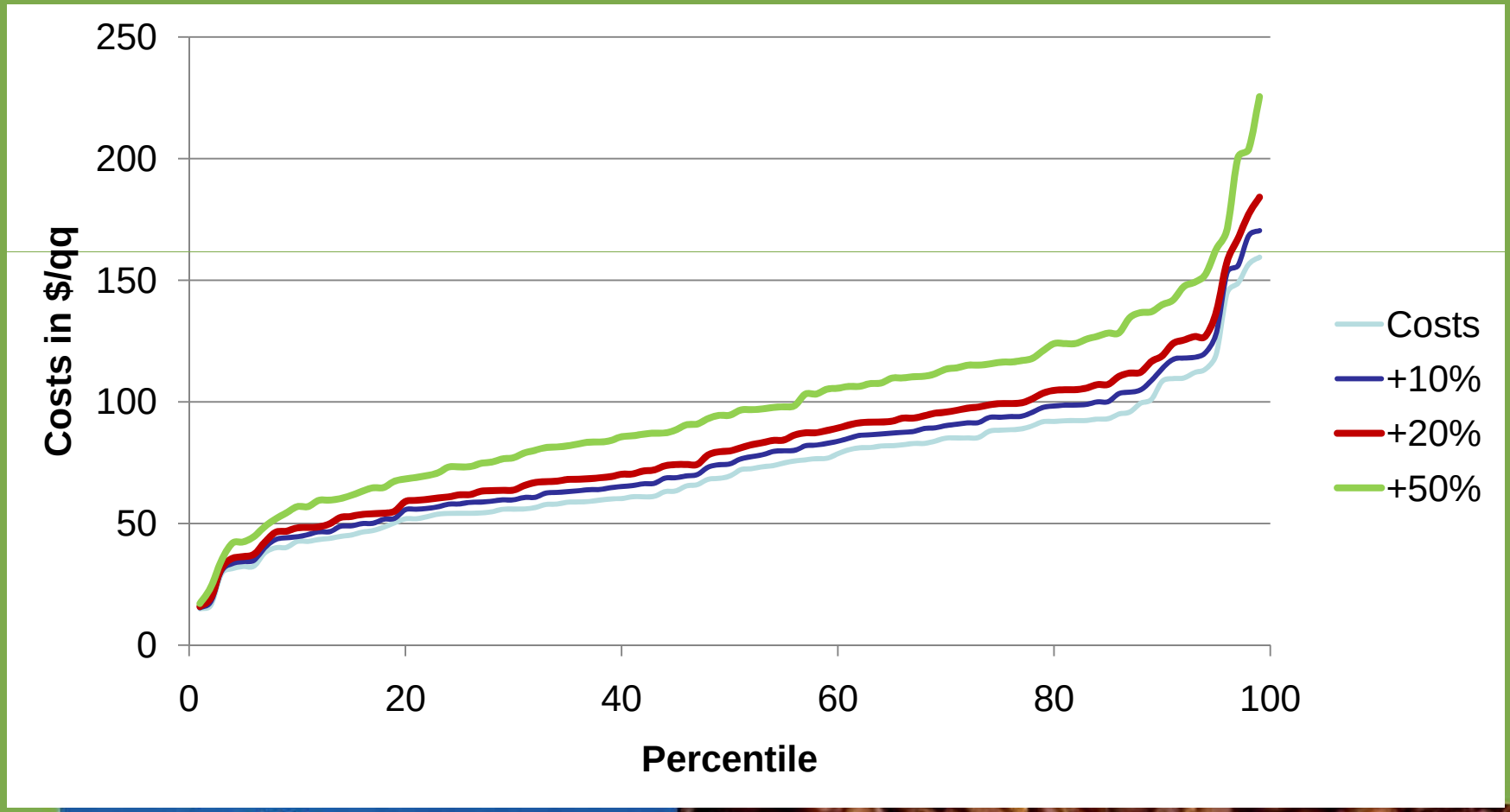
Effects of a further increase of labor costs



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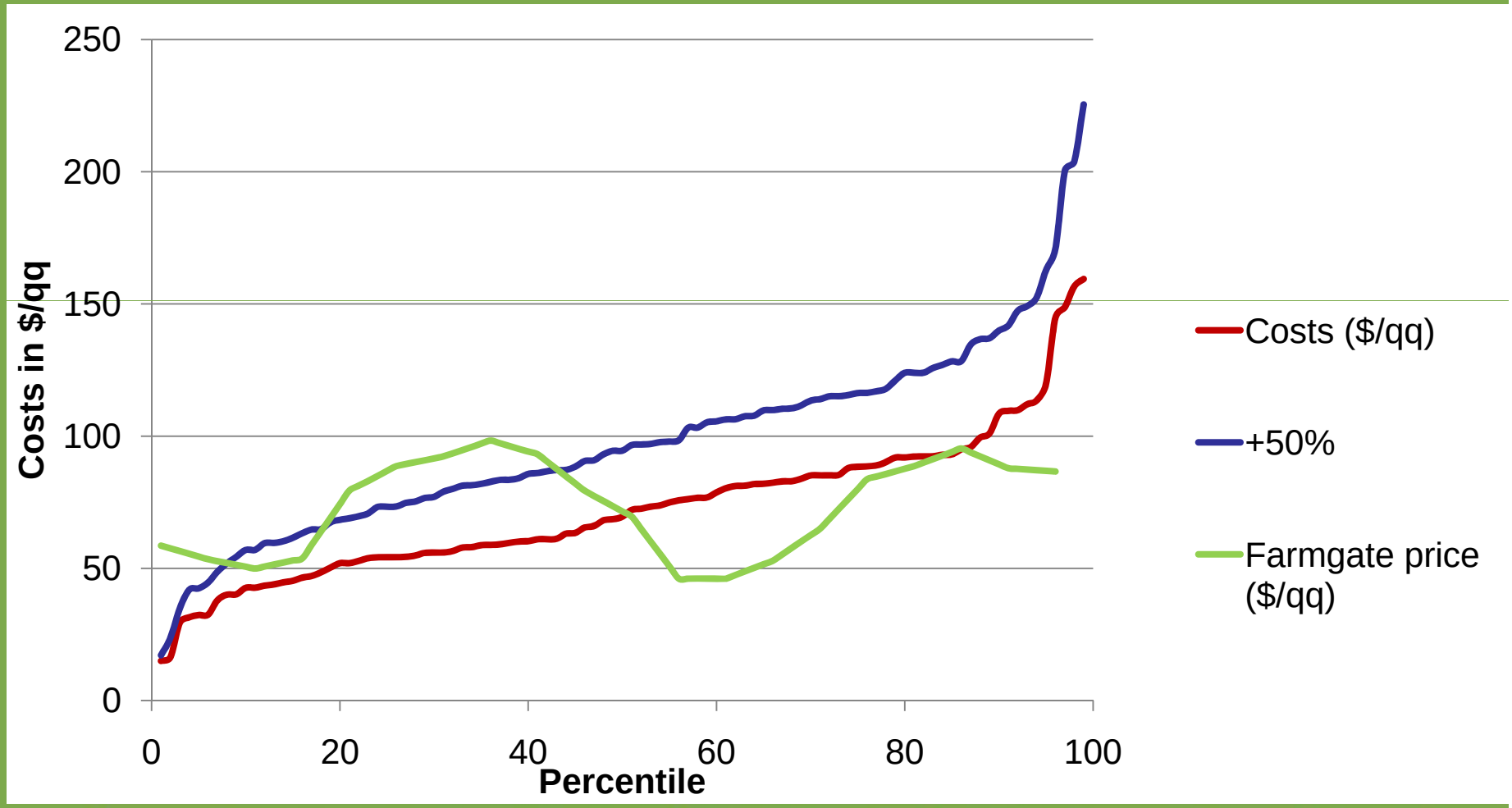
Economic impact of further price increase for labor



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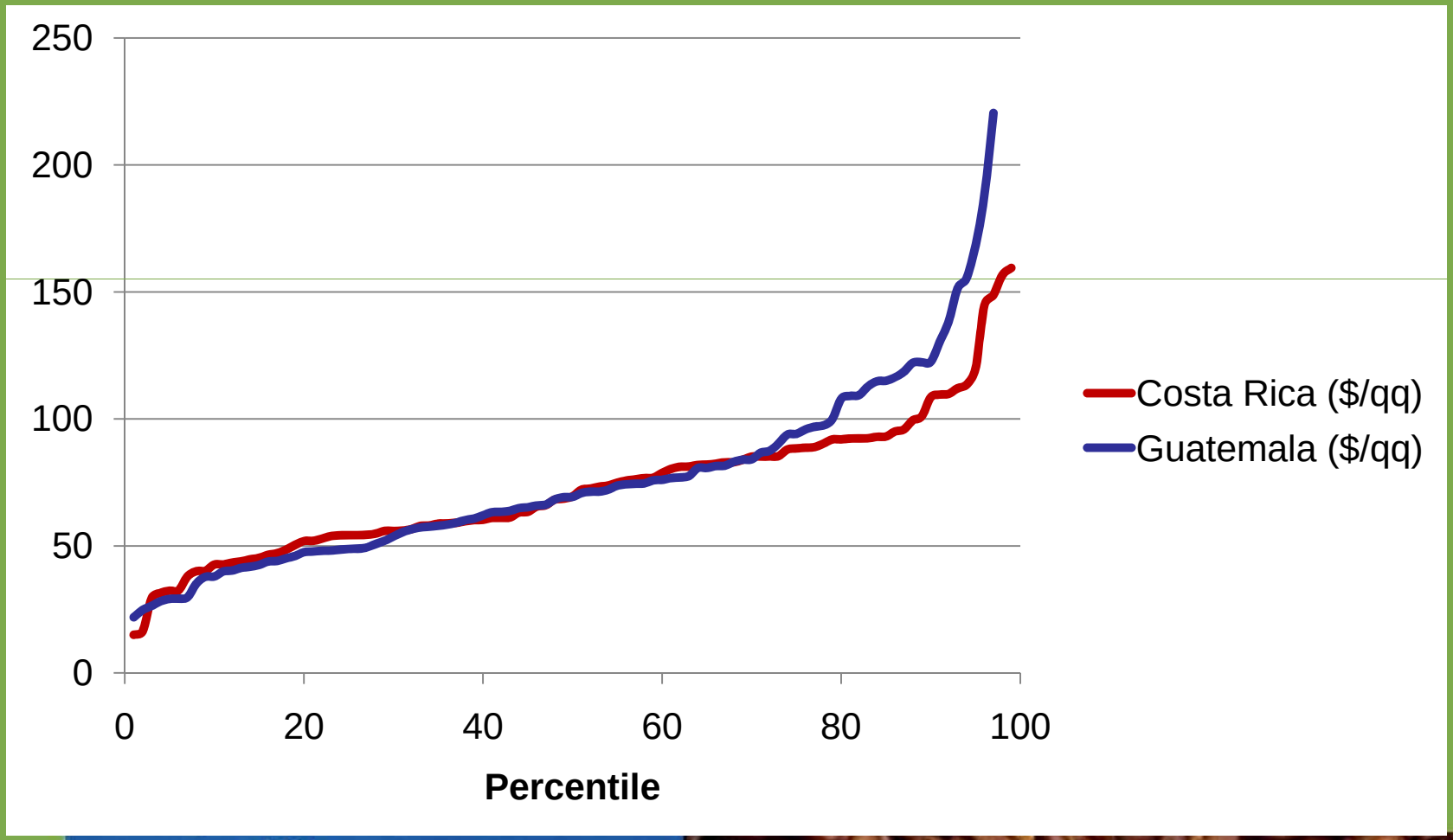
What about Costa Rican's production cost in comparison to its neighbors?



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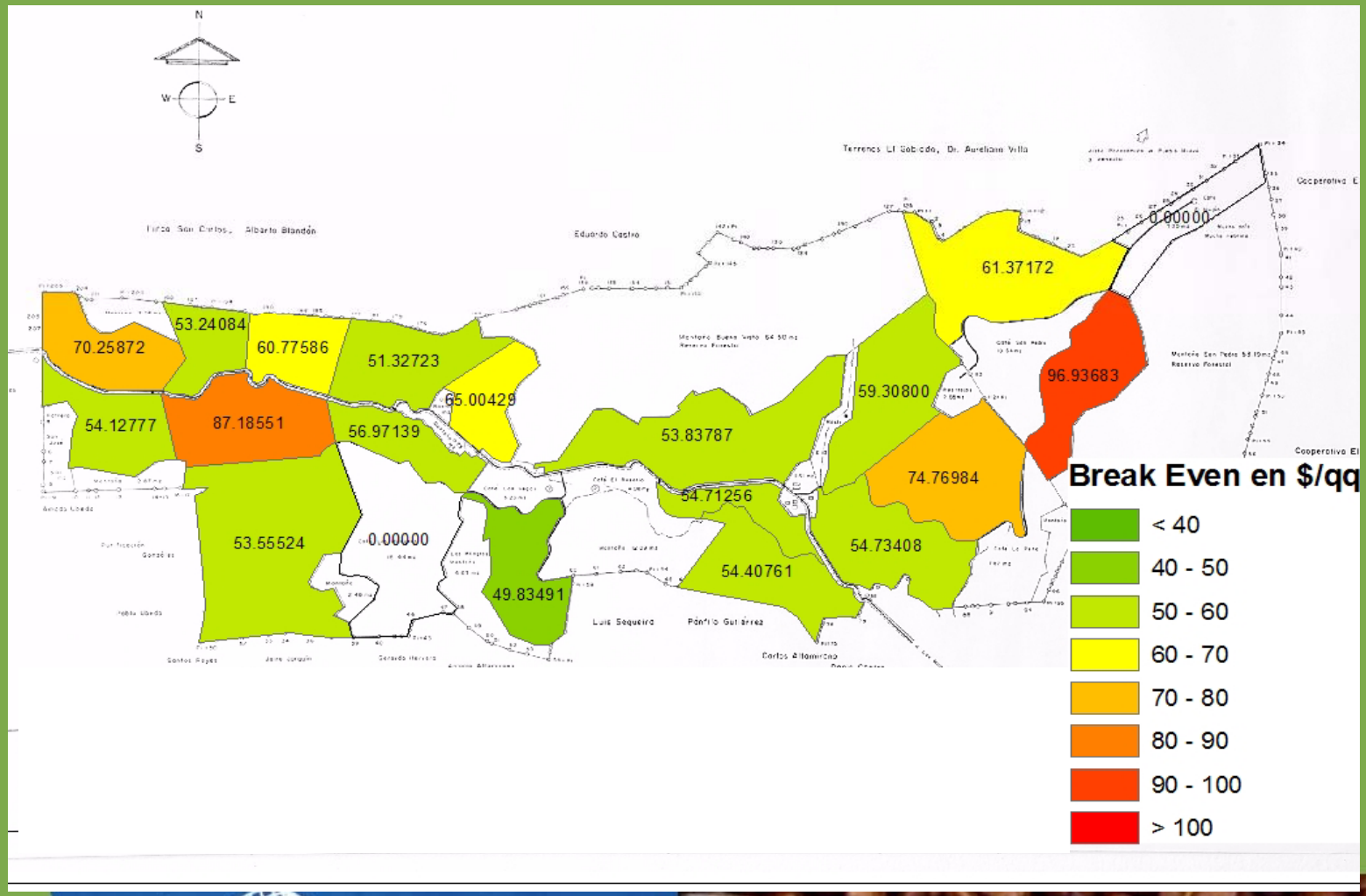
Understanding Coffee Economics – Precision Agriculture



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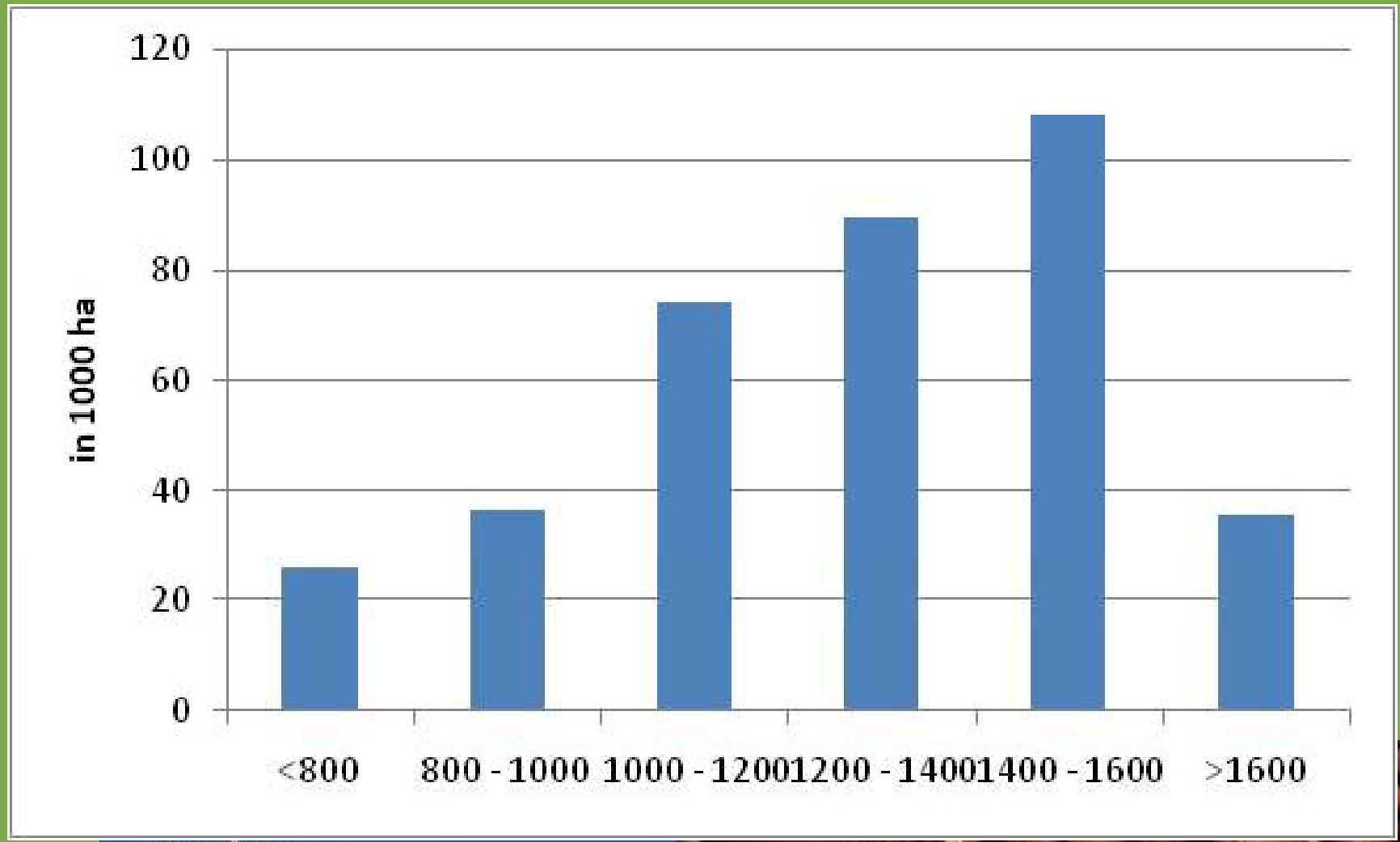
Distribution of coffee production according the altitude



What is not included in “costs”?

Investments and Improvements

- Price of land
- Capital investment for improvements
- Quality upgrades
- Certification
  - Cert, +….
  - Related environmental and social improvements
- Irrigation (now or in the future)
- Finance

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Land

Changing or expanding the harvest area?

Costa Rica: 1 Ha of “clean” land in Dota is $13 000.

Amortized over 10 years: US$43.30/qq or US$0.43/lb (interest=0)

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Certification

Costs vary due to many factors, but approximately:

-RA certification: $600-700/10 Ha farm

-Fairtrade: $1800 per cooperative < 50 members

-Organic: $30/ha assuming 50 ha farm

But that is only for the audit for certification

- environmental improvements to comply?
- social improvements to comply?
- additional recordkeeping

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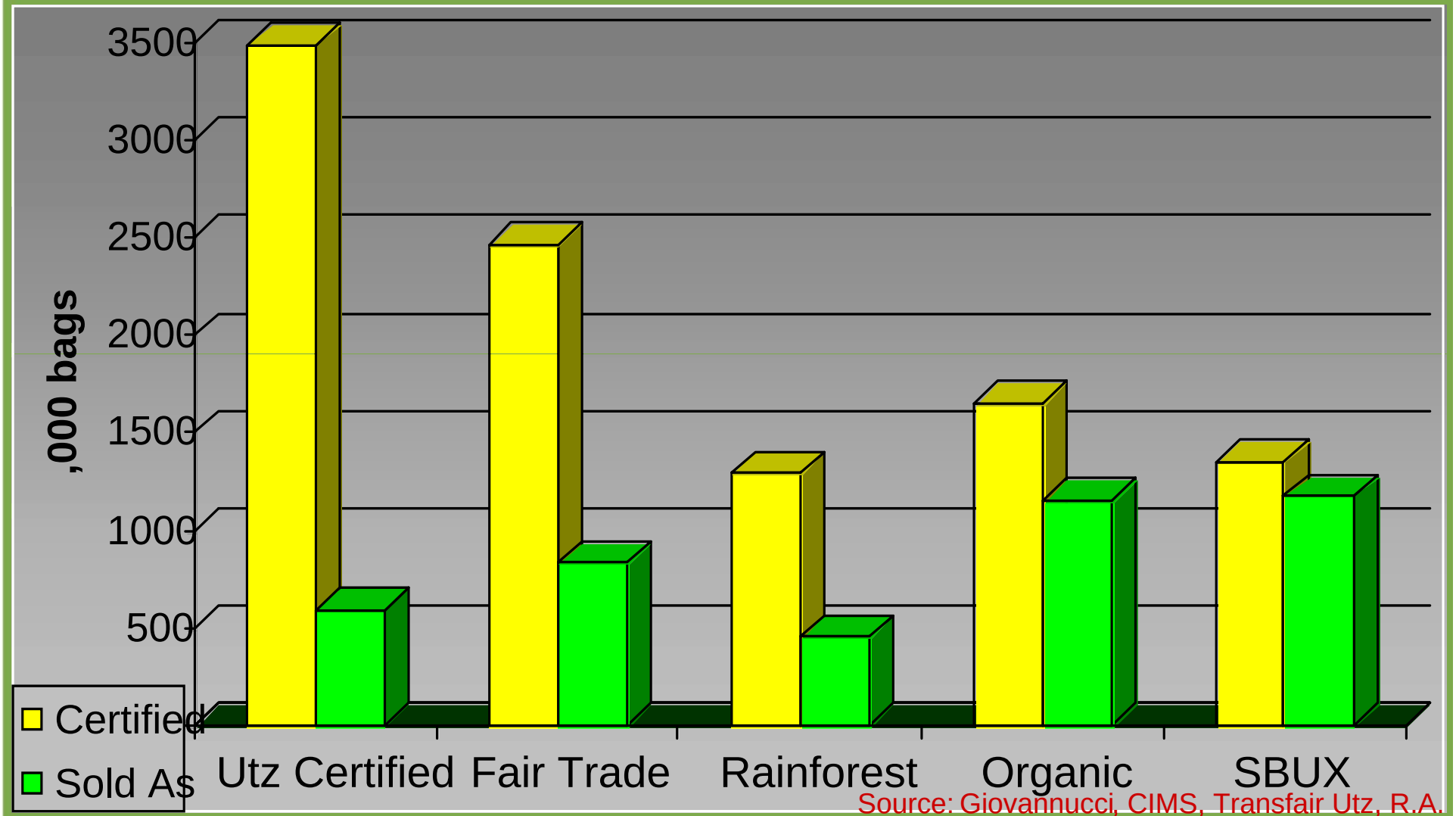
2006 Sales and Certified Global



Source: Giovannucci, CIMS, Transfair Utz, R.A.

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Water

Wastewater treatment (aguas mieles)

-Example: Guatemala-- $14 600 for 162 ha US$3.32/qq (0.03 per lb)

-Example: Colombia-- $515 for 3 Ha producing 90 qq green coffee = US$5.72/qq (0.06 per lb)

Drip irrigation system

-Costa Rica: Installation and equipment =$1530/ha (US$0.05/lb over 10 years)*

**Assuming producers already possess water source and pump*

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Social

Social investment:

Social charges for 1 permanent worker in 2008 is approximately $1515 (Costa Rica)

Quality of life investements for permanent and temporary workers?

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Yield

Yield investment

The renovation cost (almácigo) of 1 Ha of coffee farm in Costa Rica is $980 (US$0.02/lb)

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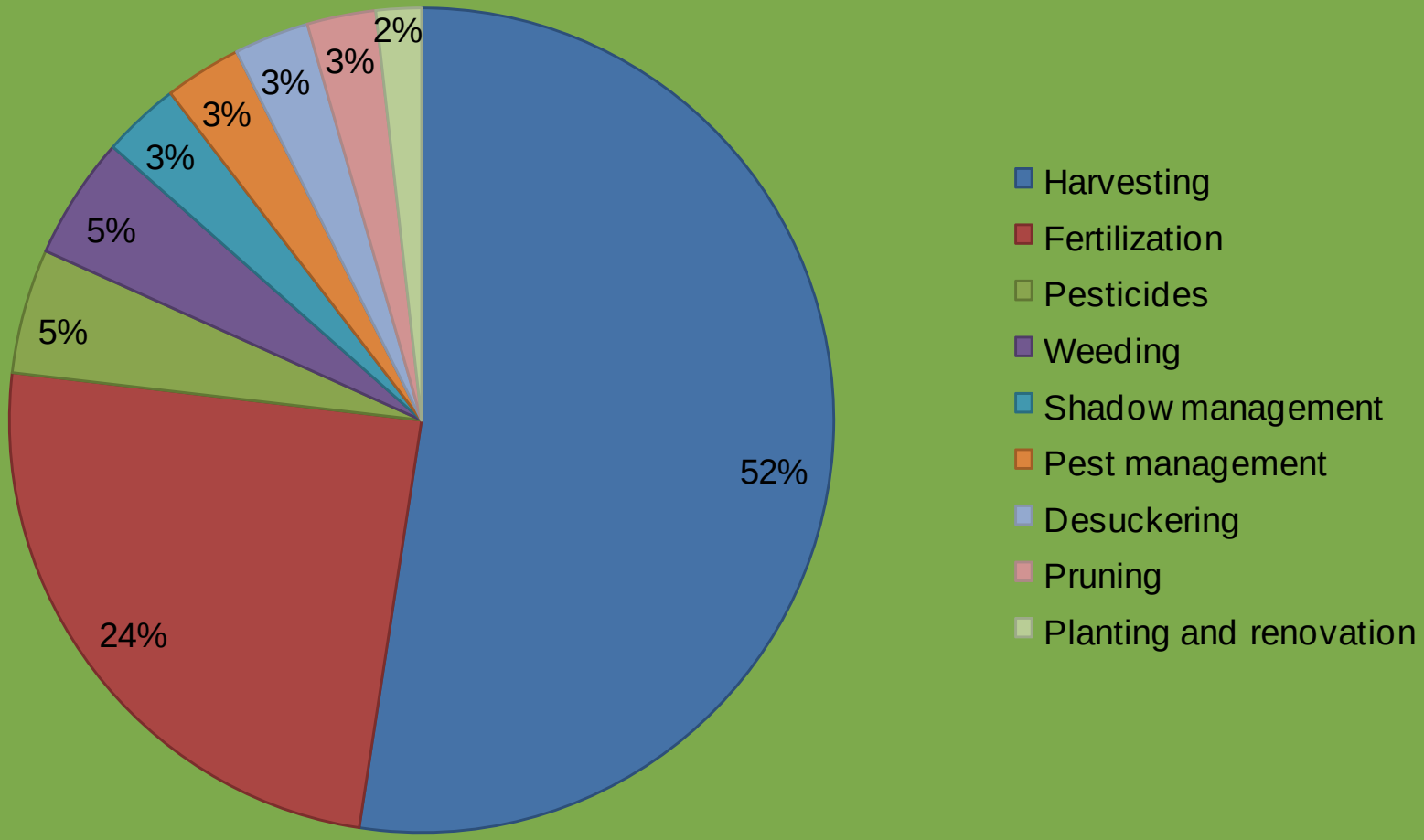
Costa Rica: Coffee farm costs distribution (harvest 2006-2007)



Source: CIMS based on ICAFE data

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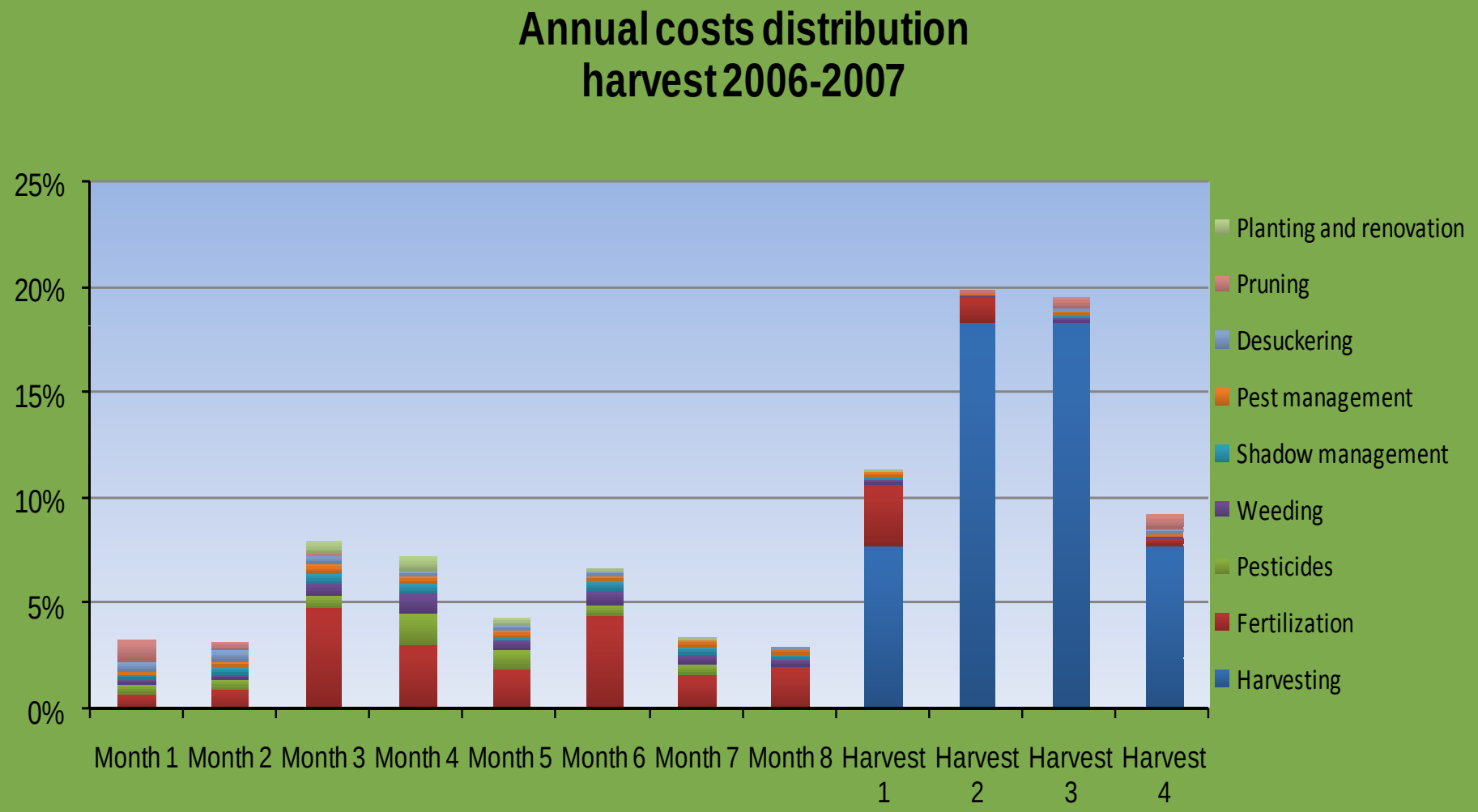
Financing coffee farm costs



Source: CIMS based on ICAFE data

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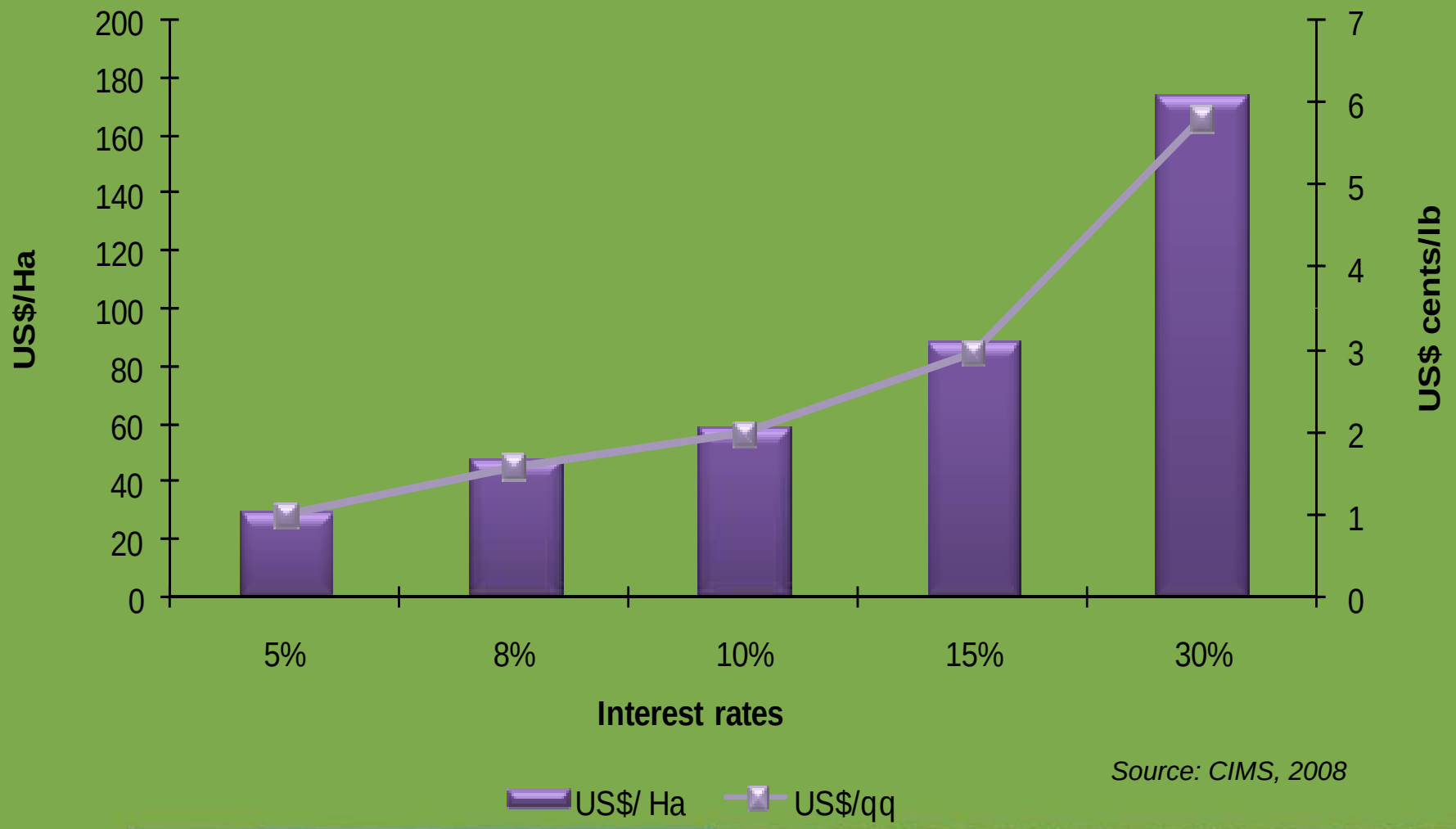
Financing costs: different scenarios



Source: CIMS, 2008

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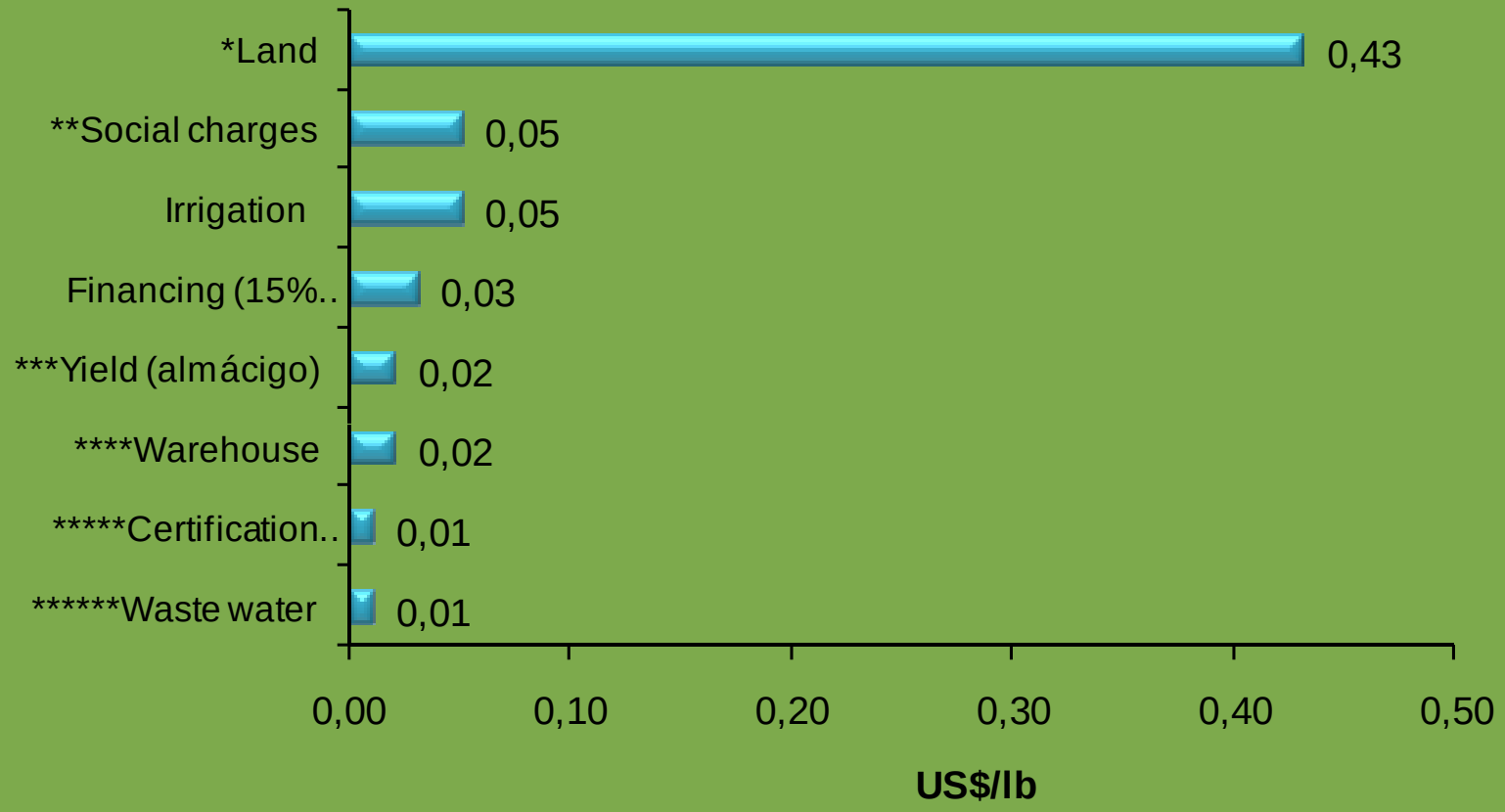
Investments (annual)



**Amortization during 10 years*
***Annual social charges for 1 permanet worker, assuming 1worker/10 Ha ratio*
****Almácigo cost for 5% annual renovation of a 10 Ha farm*
*****Amortization during 10 years of a 60 m2 warehouse, assuming 1 warehouse/10 Ha ratio*
******Annual certification cost for a 50 Ha farm*
*******Waste water plant treatment assuming 10 years period of amortizations*

Source: CIMS, 2008

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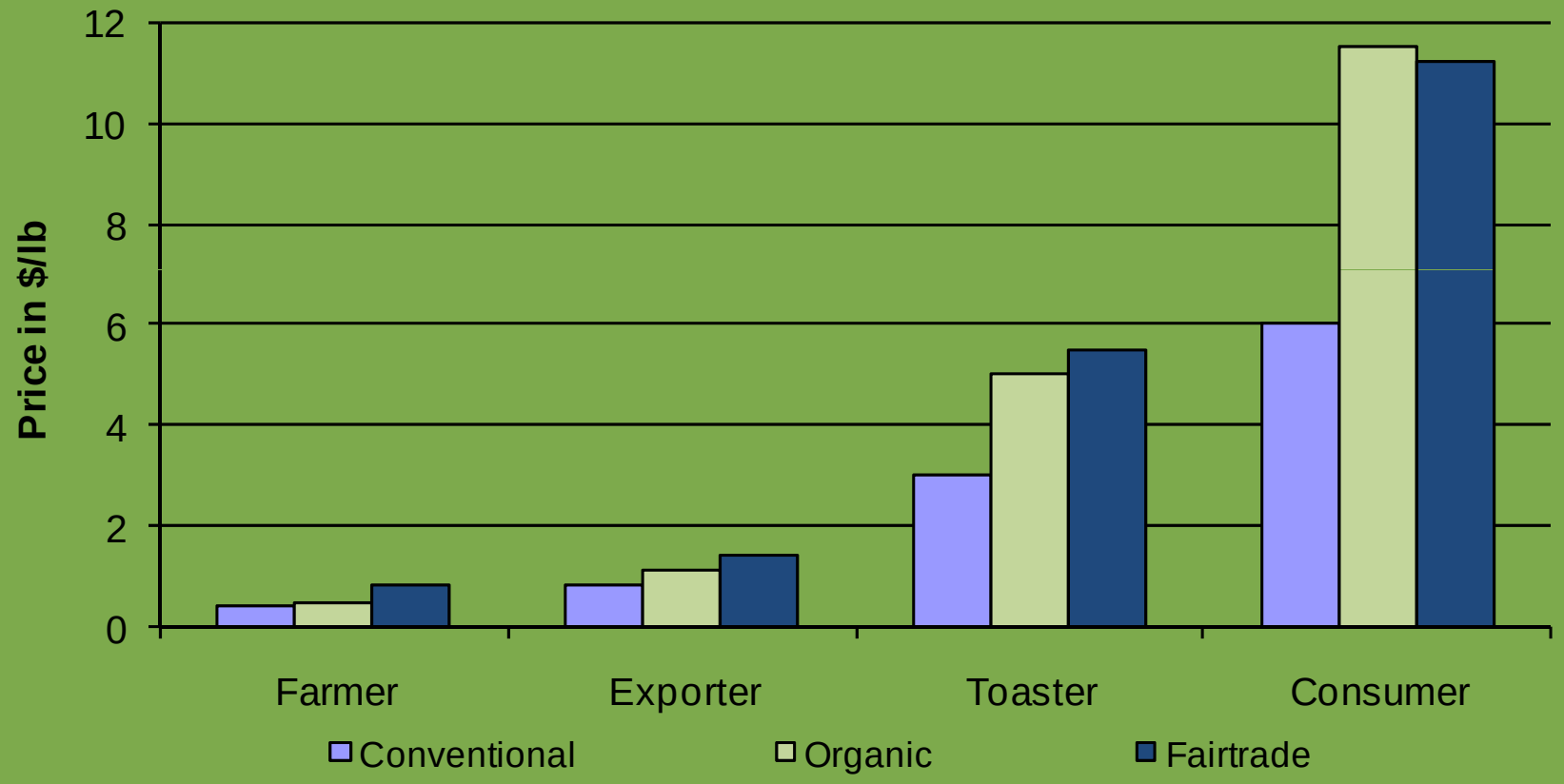
Coffee prices along trade channels in the USA



Source: CIMS 2004 and ICO 2004

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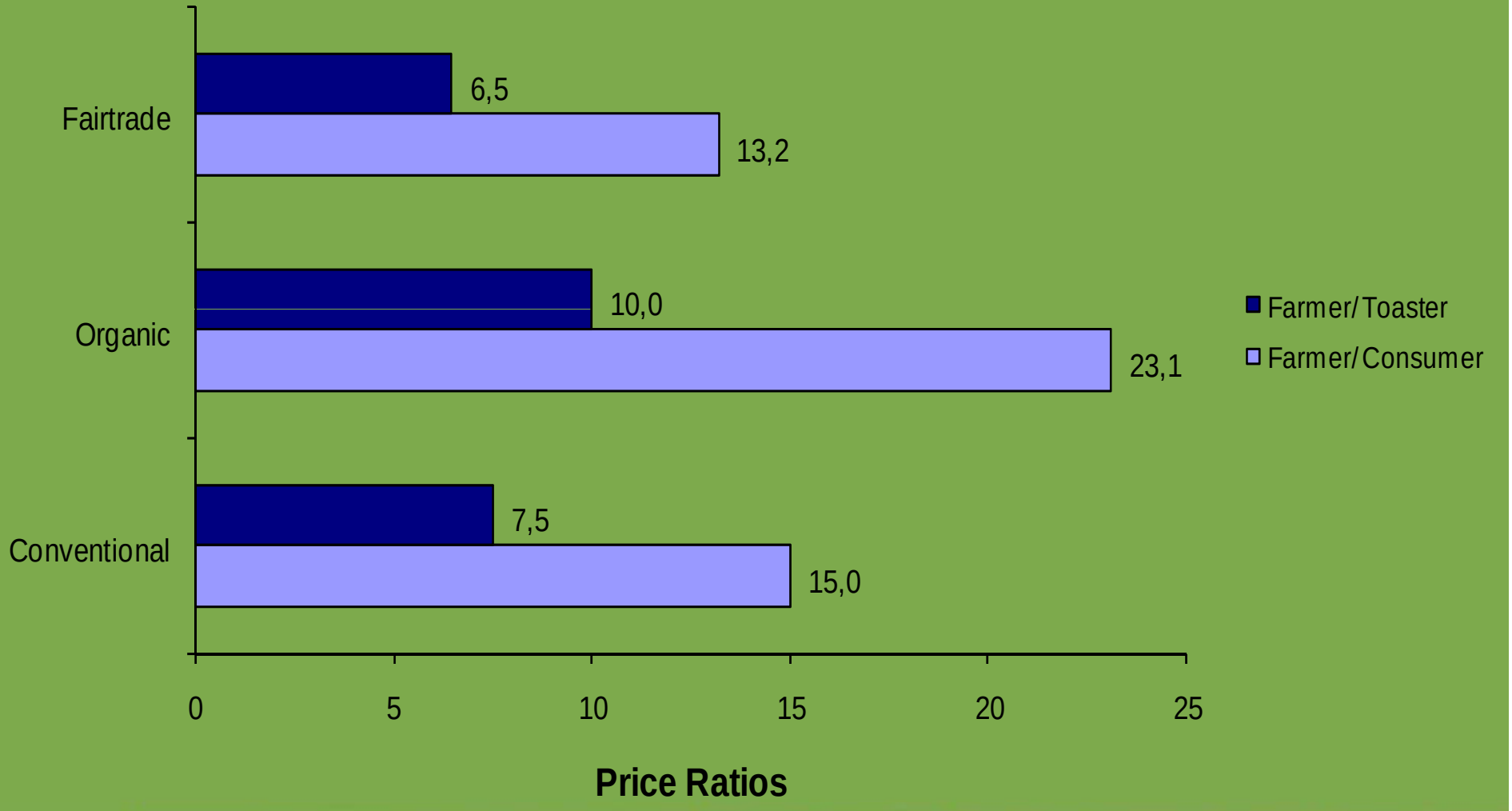
To get “X” to the farmer, we will be asking customers or roasters to pay…..



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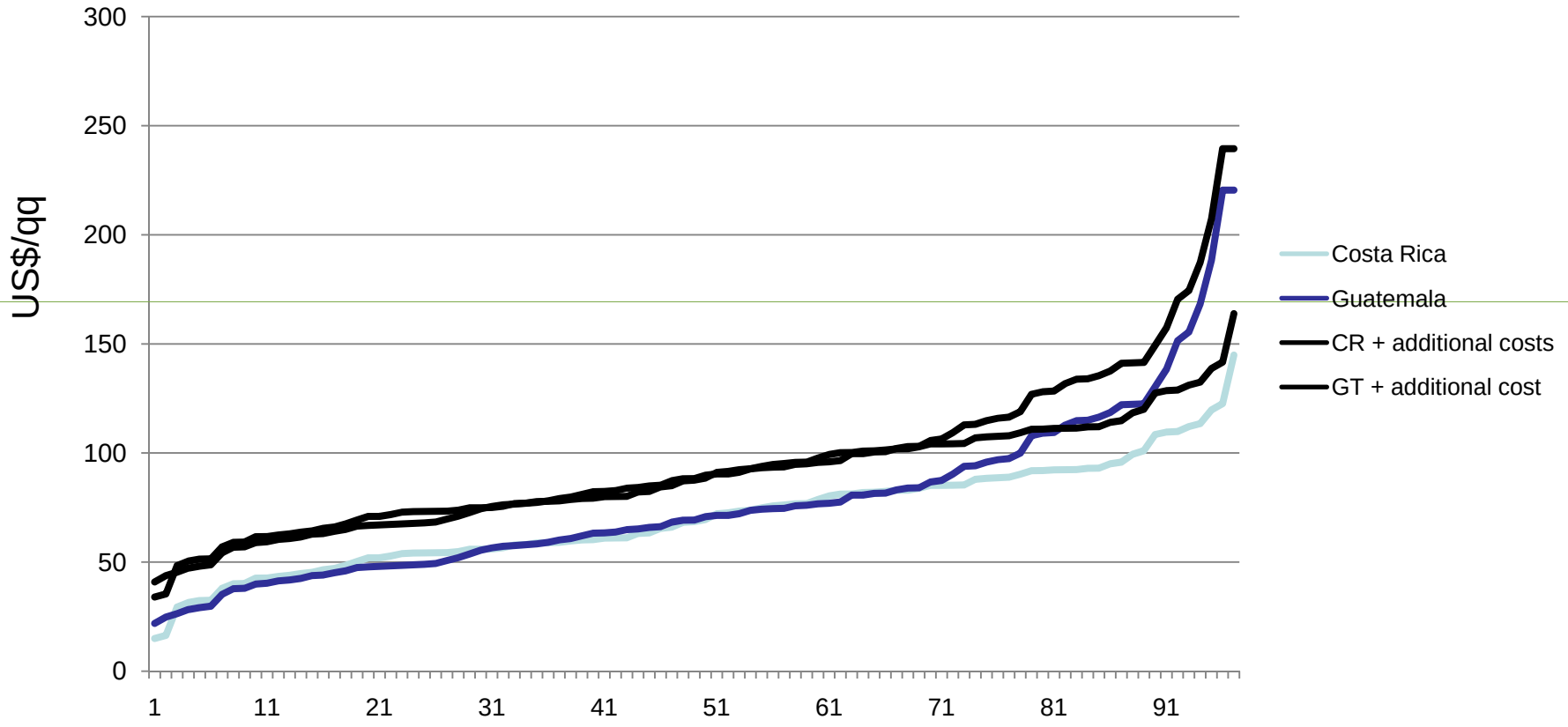
Cost curves and additional investments (excluding land)



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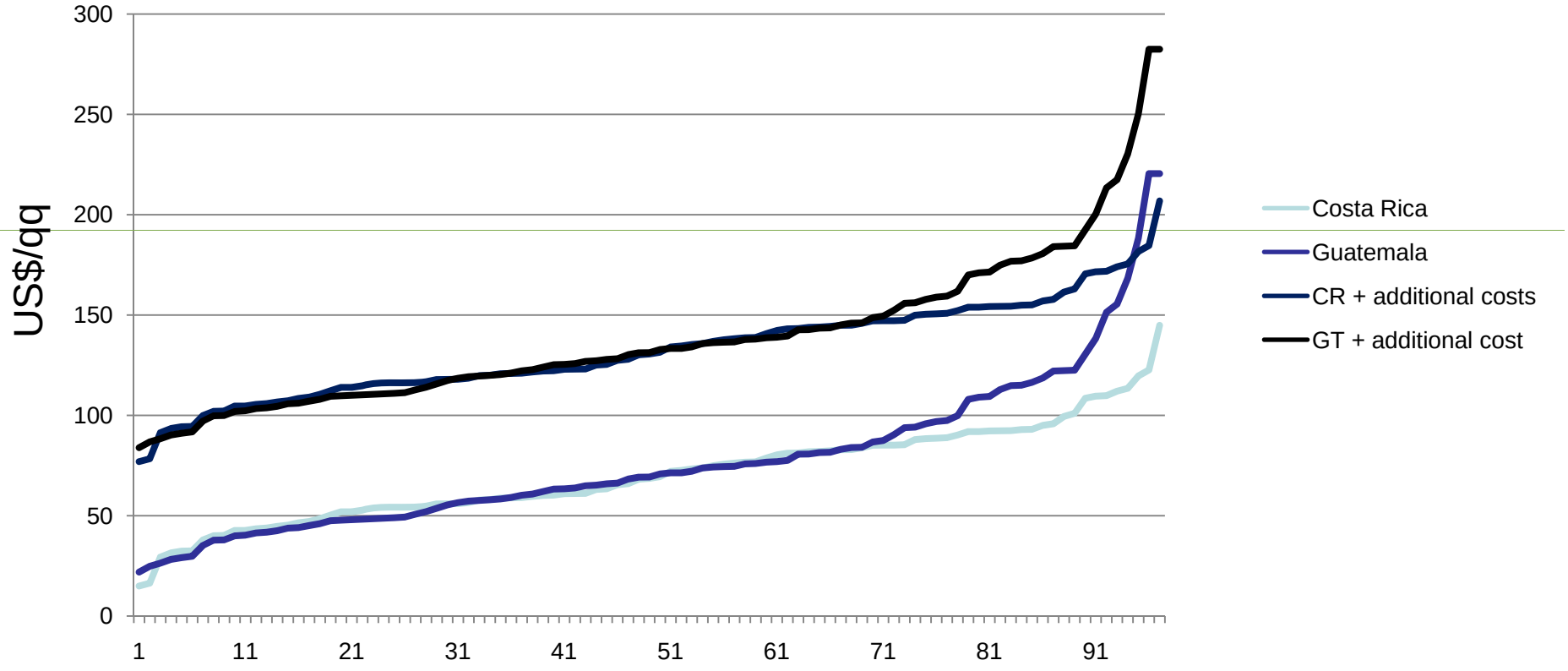
Cost curve + Additional investments



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Key Findings

- There is no “magic number” on costs or price
- Evidence of an unsustainable future
  - Economic
  - Social
  - Environmental
- Dramatic under-investment (by default)
- Key step has to be on-farm income

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Three “Frontiers”

- Price issues

  - important, but not determinant
- Cost issues and Productivity
- Value Chain
  - Price premium (consumer backward) is extremely inefficient in passing benefit.

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