



Barry Callebaut

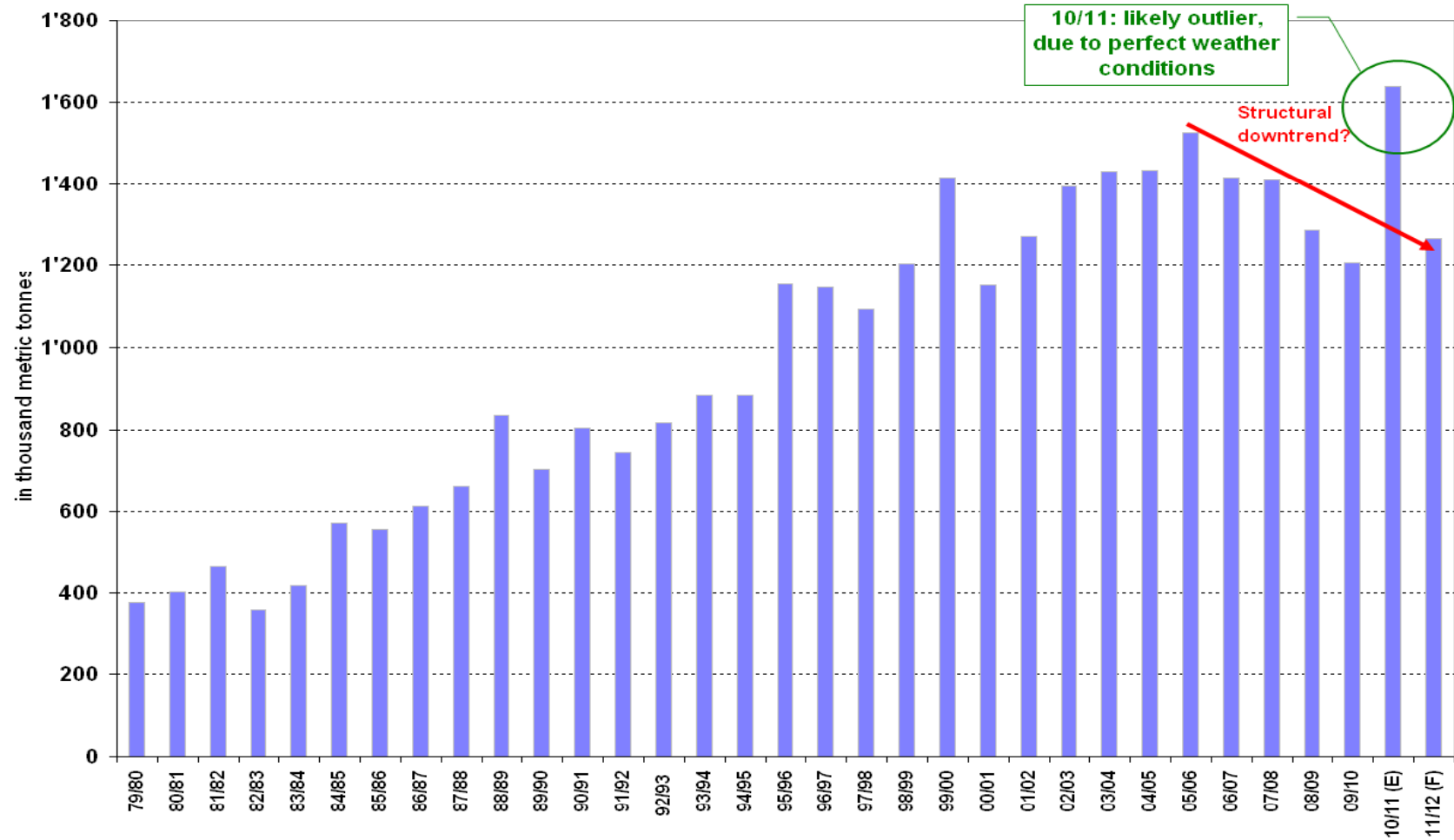
"Improving sustainable Cocoa Supply"

Steven Retzlaff – President Global Sourcing & Cocoa



Ivory Coast – A lost decade

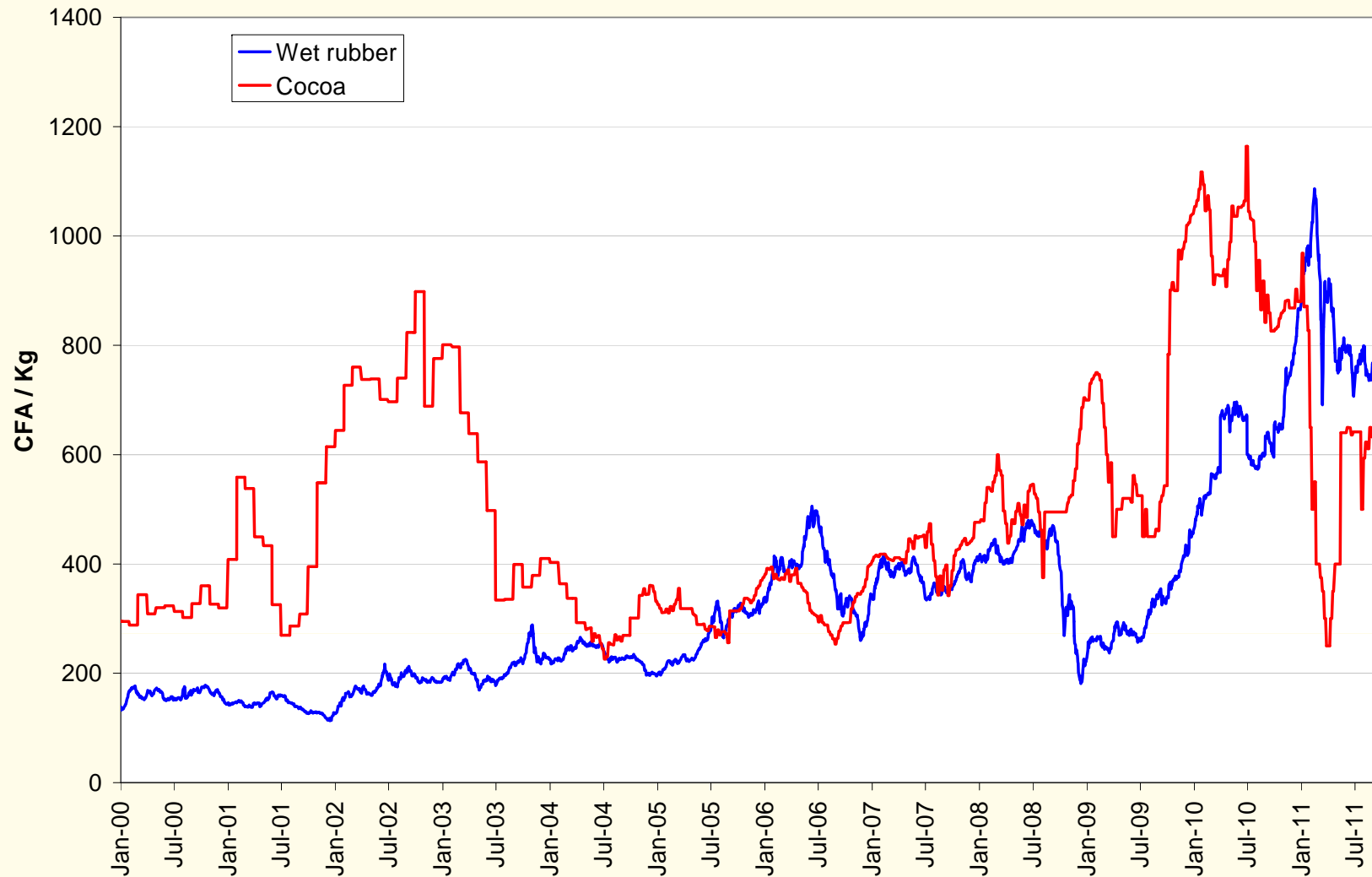
Cocoa Production in Côte d'Ivoire (tree crop)





Cocoa vs. Rubber : IC farmgate prices

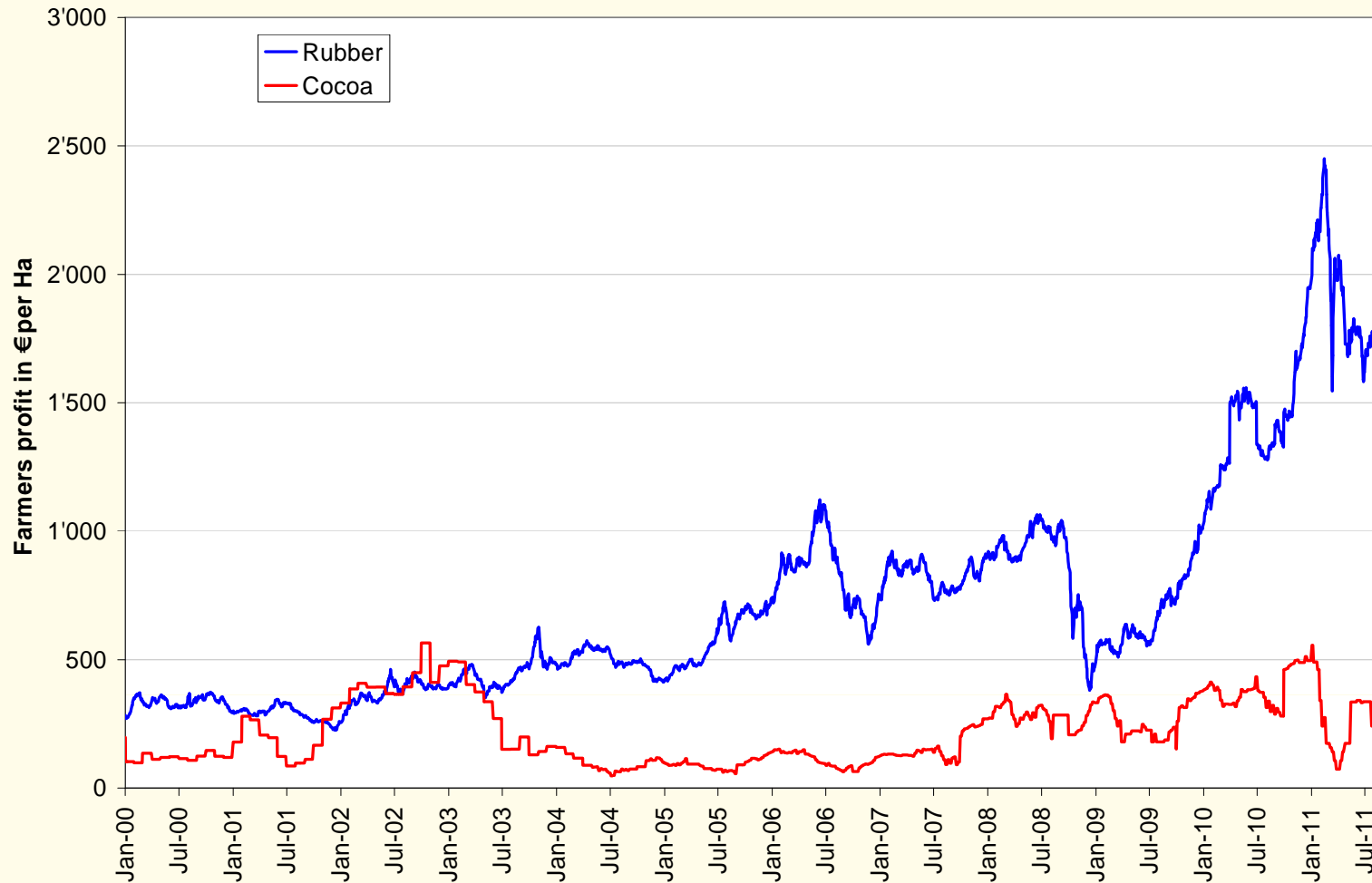
Ivory Coast Rubber vs. Cocoa farmgate prices, CFA/kg





Rubber's returns have largely exceeded those for cocoa for the past 7 years in IC, thanks to the crop's high yielding property

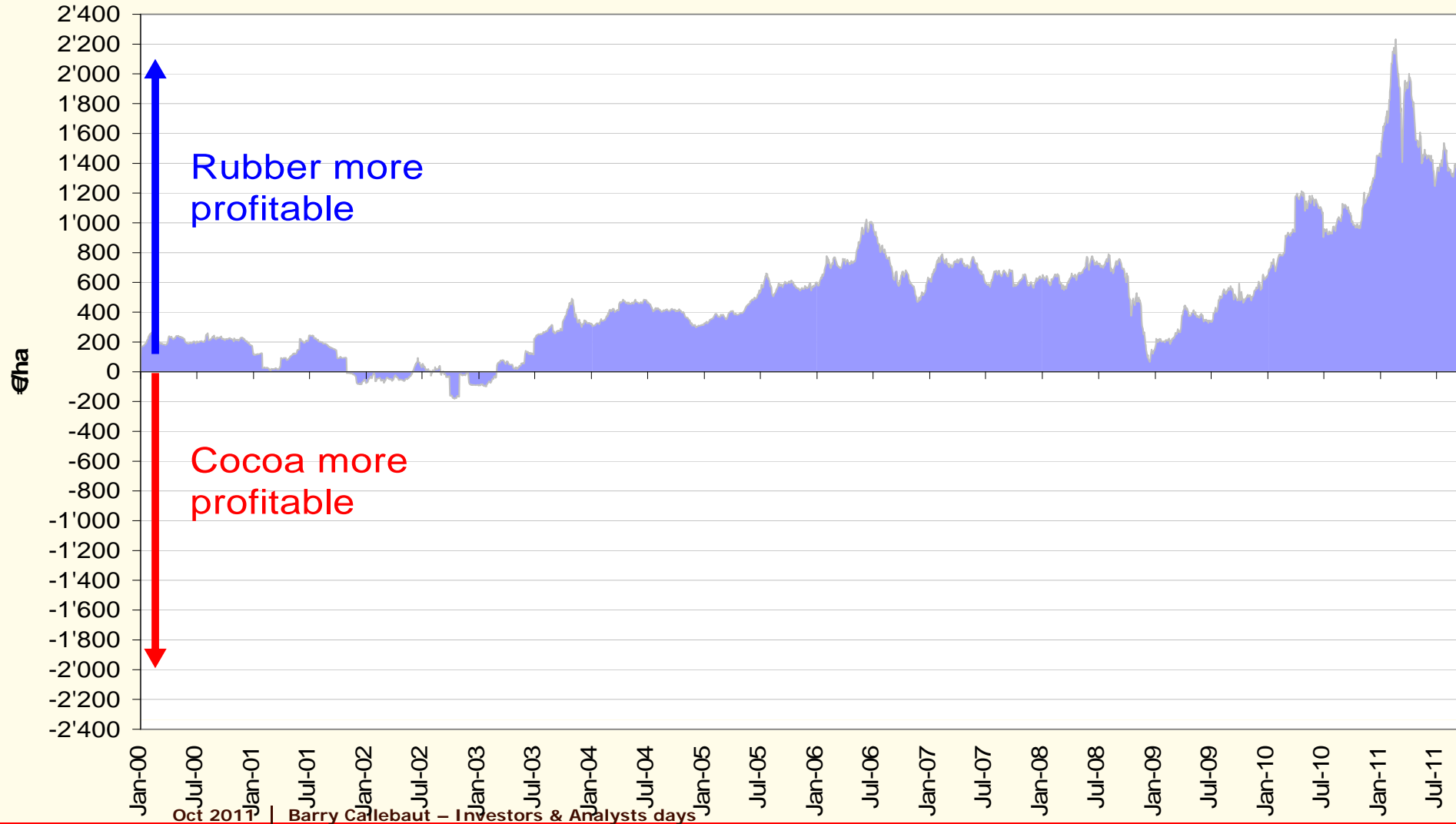
Profitability for mature plantations in Ivory Coast :
rubber vs. Cocoa (€/ha, no external Labour)





Rubber is more profitable than cocoa in Ivory Coast

Excess return of Rubber vs. Cocoa farming in Ivory Coast per Ha





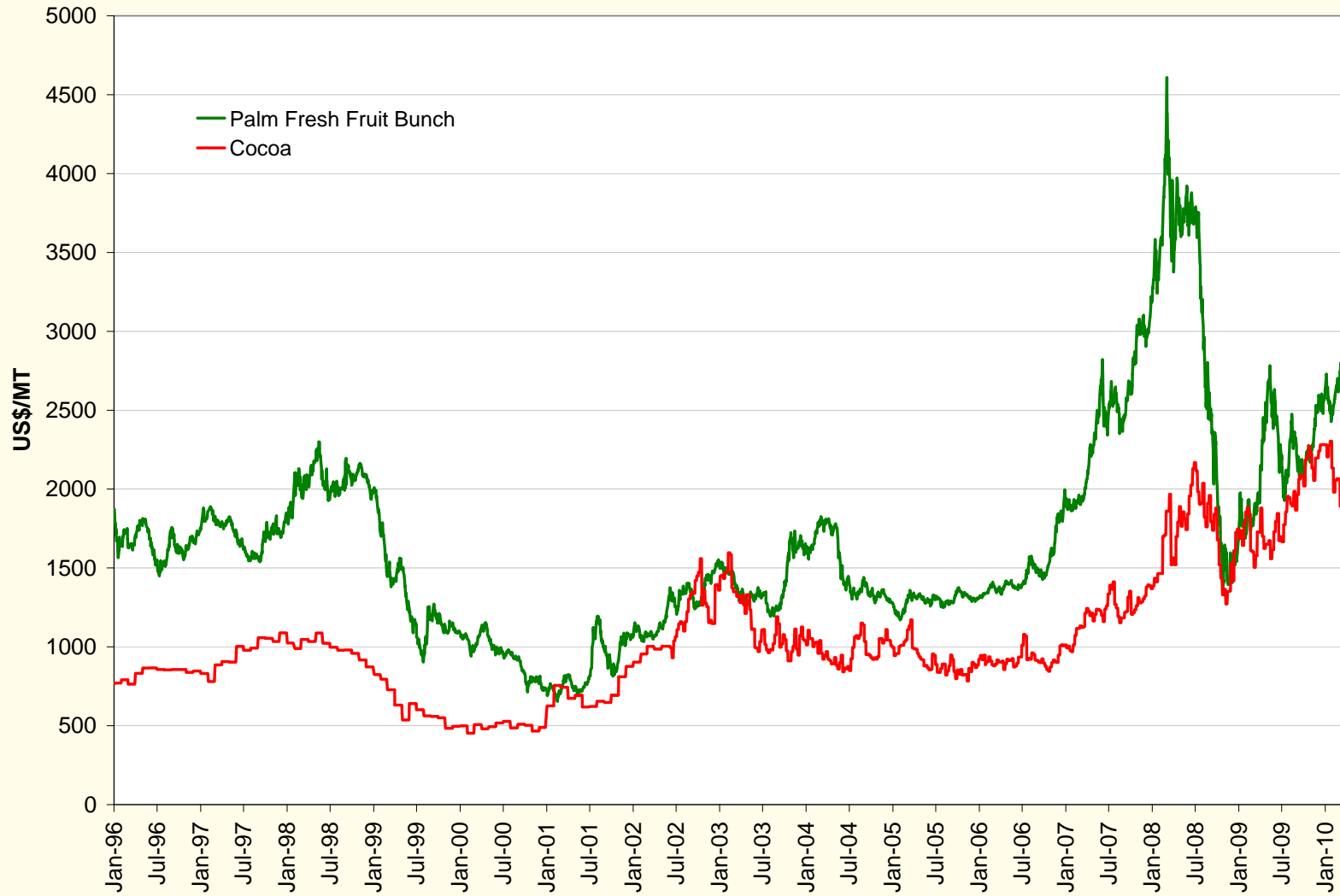
Ivory Coast: cocoa vs. rubber

- ▶ Following 40 years of dominance, cocoa is now under severe threat from other crops in Ivory Coast, particularly rubber
- ▶ For most of the past 10 years, farmers in IC had a much larger share of the world price for rubber than for cocoa, due to much lower taxation
- ▶ Rubber is also providing higher yields, while requiring less inputs (1/2 bags fertilizers per ha vs. 6 for cocoa, no pesticide/fungicide needed in the majority of cases)
- ▶ Finally, cash management at farm level is improved in the case of rubber, where farmers have a monthly income, vs. a concentrated harvest in the case of cocoa



Indonesia: cocoa vs. palm prices

Comparative Palm/Cocoa farmers price Indonesia

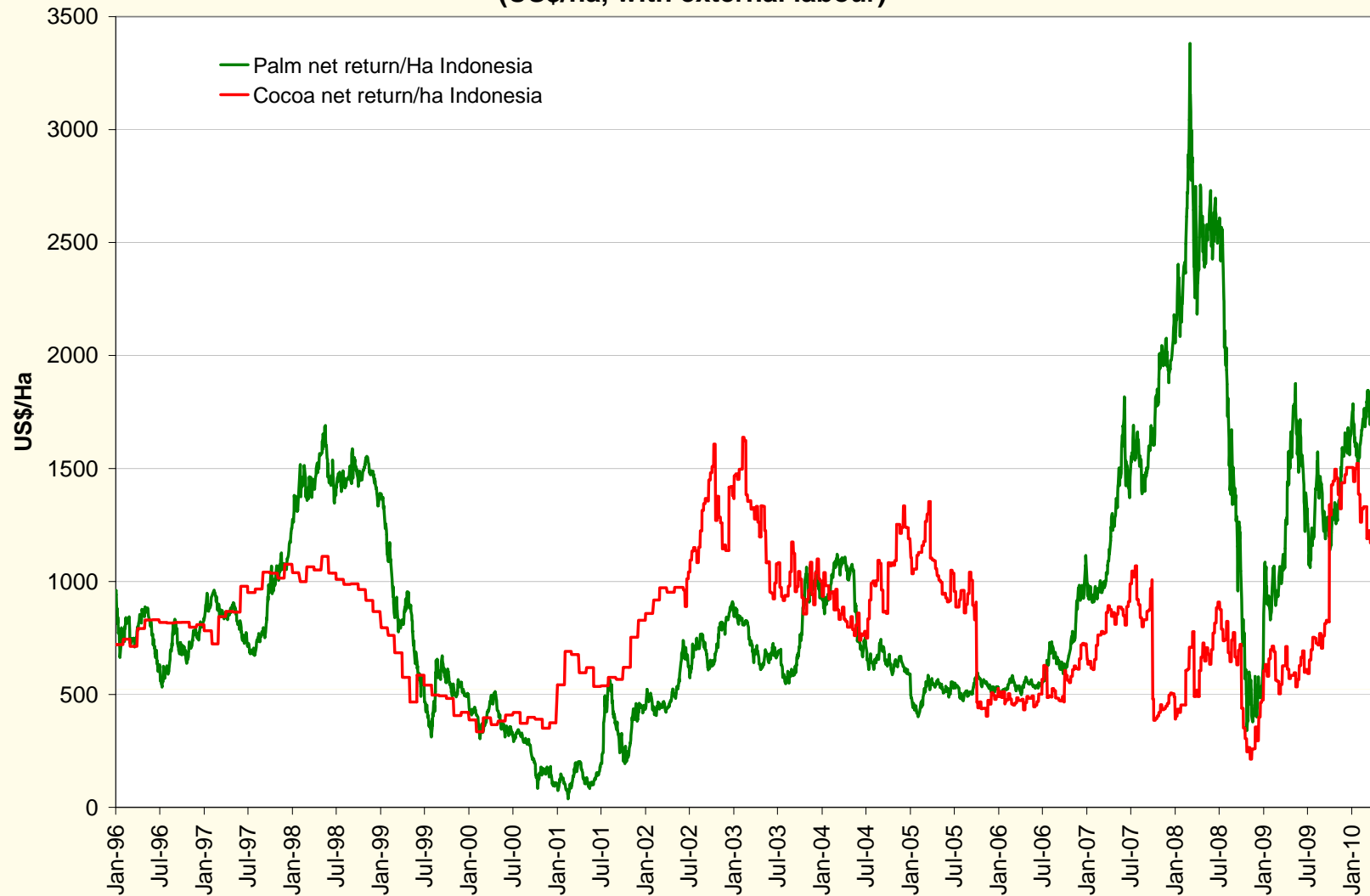


NB: palm fruit prices est. based on Malaysian Board FFB benchmark



Indonesia: cocoa vs. palm net profitability

Comparative Palm/Cocoa average profitability in Indonesia
(US\$/ha, with external labour)

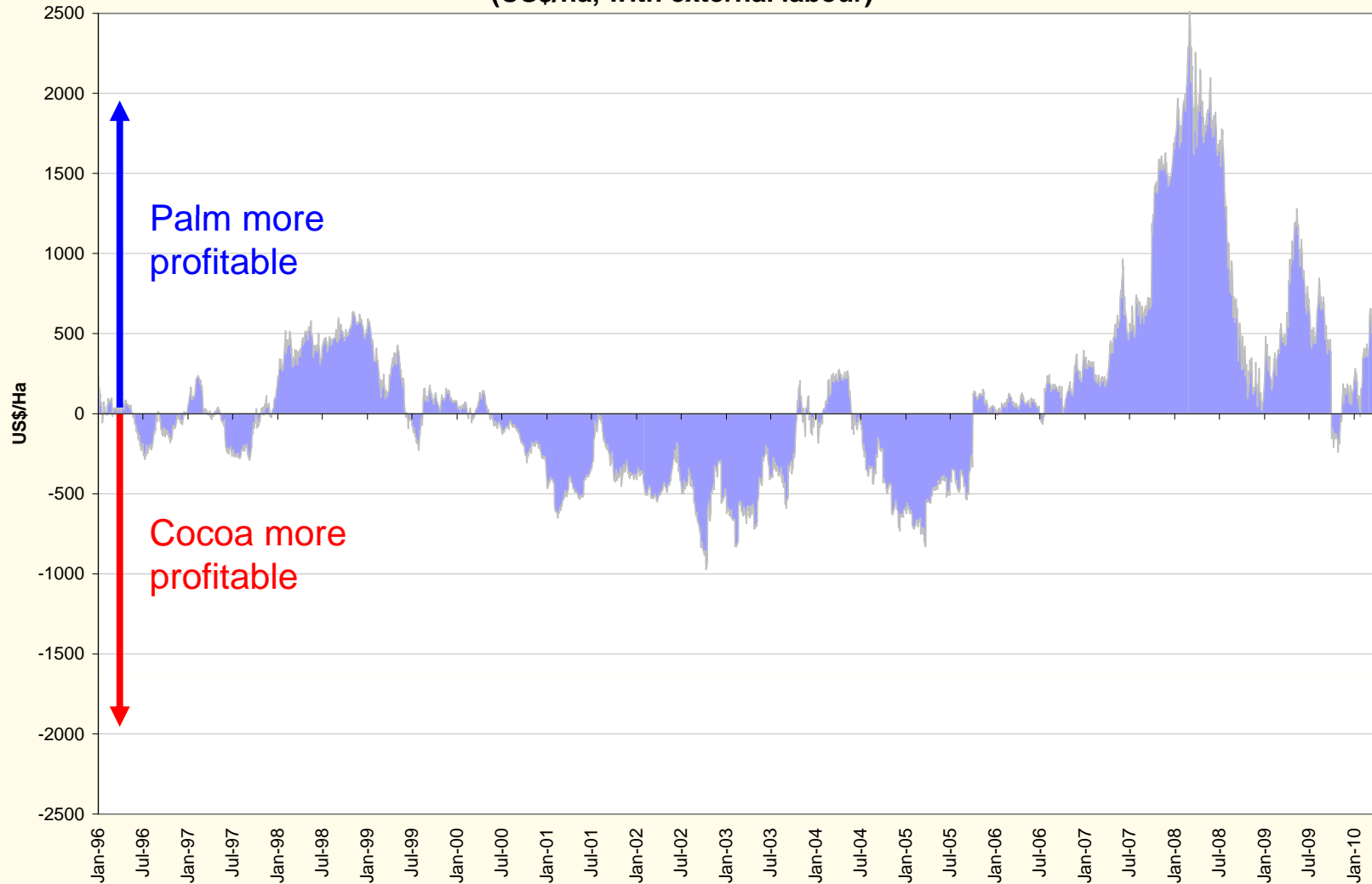


NB: palm fruit prices est. based on Malaysian Board FFB benchmark



Until 2007, cocoa was more profitable than palm for Indonesian farmers

Comparative Palm/Cocoa average profitability in Indonesia
(US\$/ha, with external labour)



NB: palm fruit prices est. based on Malaysian Board FFB benchmark



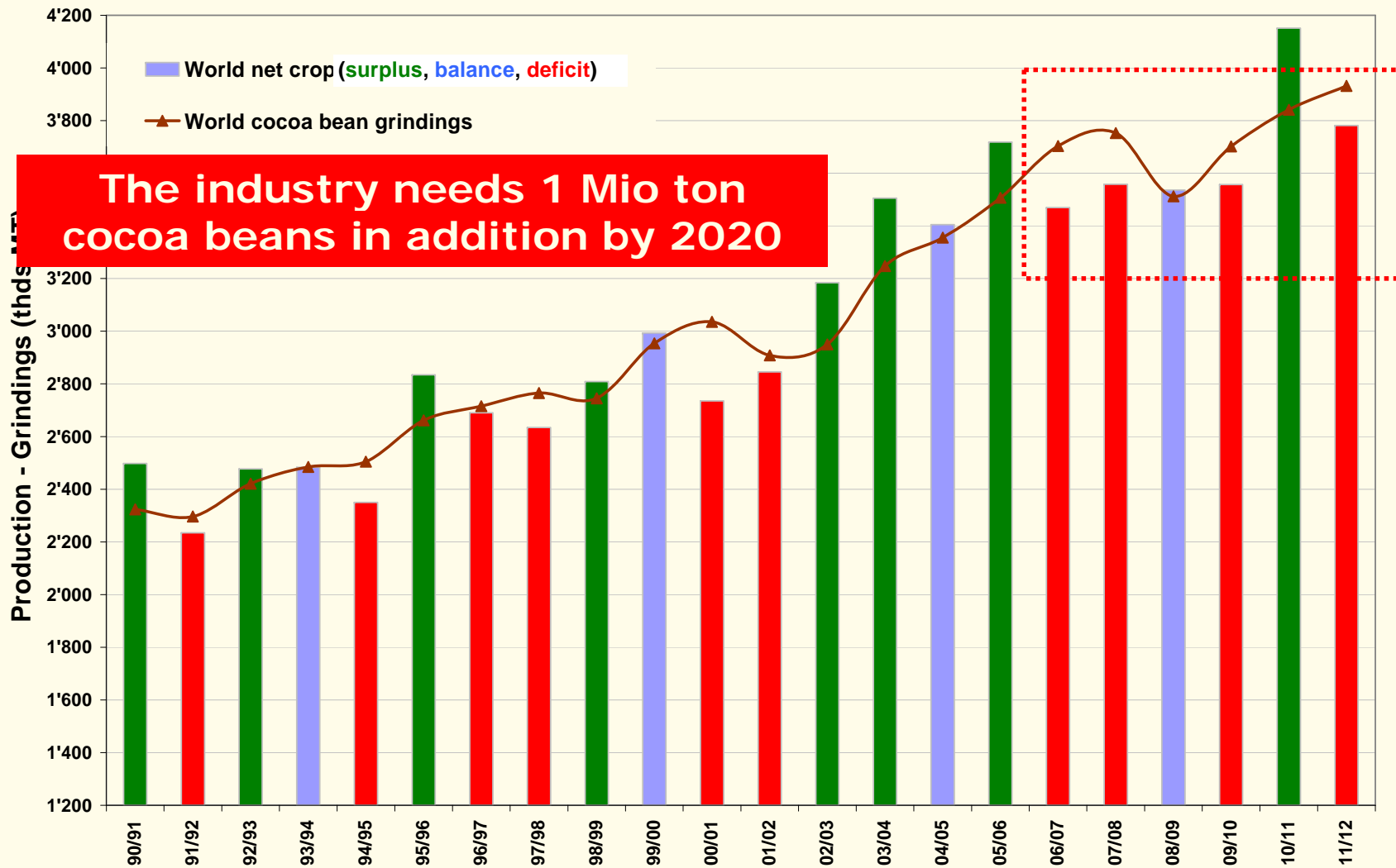
Cocoa vs. Palm: conclusions

- ▶ The high yielding profile of cocoa farms in Asia makes it relatively well profitable relative to its main competing crop
- ▶ However, rising palm oil prices remain an important threat
- ▶ Farmers in SE Asia are far more driven by price incentives in the short term than their African peers, thus any wide price advantage rapidly triggers acreage shifts
- ▶ This was obvious during the 2007-08 period, when vast acreages of cocoa farms in Sulawesi were replanted with palm trees, soon after palm farming became more profitable



World Cocoa Supply Struggles to Satisfy Demand: Is there a sustainable solution?

World Cocoa Supply-Demand





How Are Our Customers Tackling Sustainability?

Our customers increasingly turn to certification as a proxy for sustainability.



BC certifies farmers via its QPP & Biolands direct sourcing models

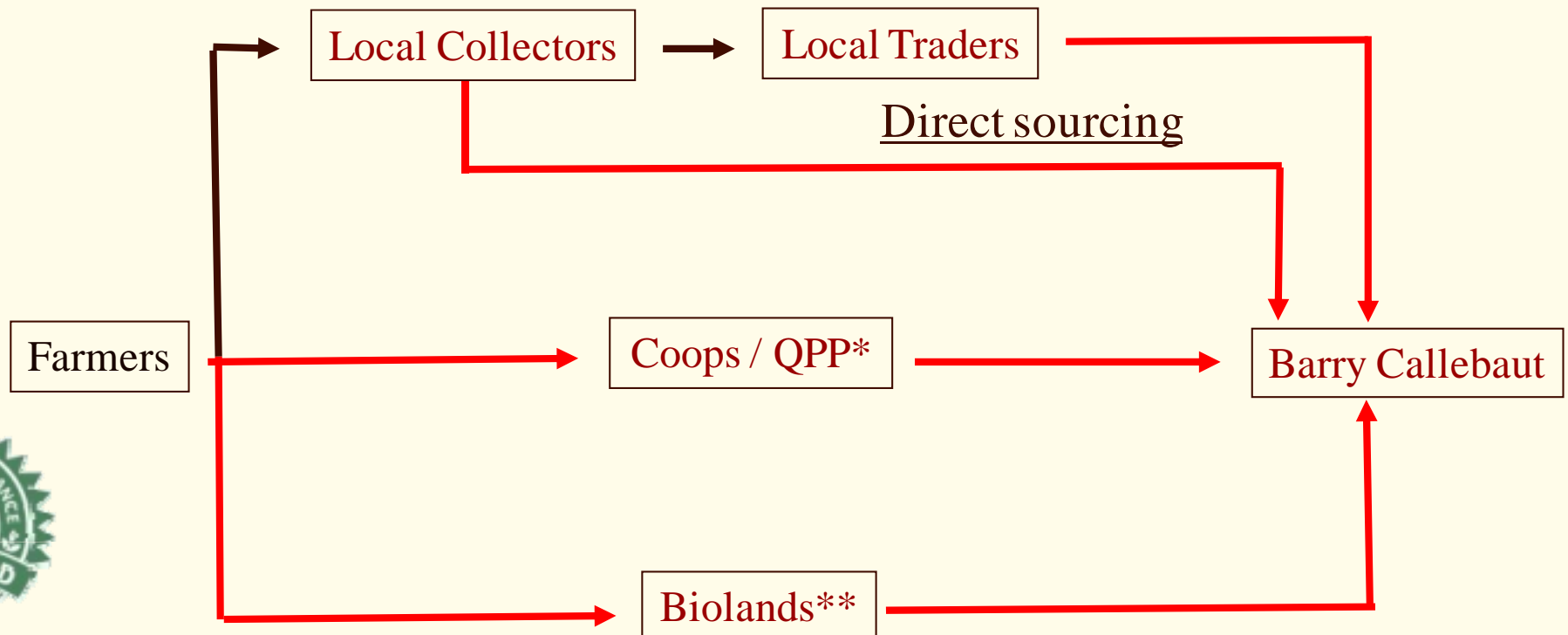


Quality Partner Program

53 cooperatives =
50.000 farmers

Biolands

Farmers Union =
25.000 registered
farmers





But is Certification “Sustainable”?

- ▶ BC believes that cocoa production is sustainable when farmers earn equitable income; engage in responsible labor practices that do not exploit or harm children or adults; safeguard the environment through sound agricultural practices and responsible use of resources; and can provide for the basic health and education needs and general well-being of their families
- ▶ Does certification address this?
 - ▶ In part. But it does not focus on improving productivity and yield per hectare
 - ▶ Which is a problem for the industry



In Summary: We have a problem...and a platform for a solution

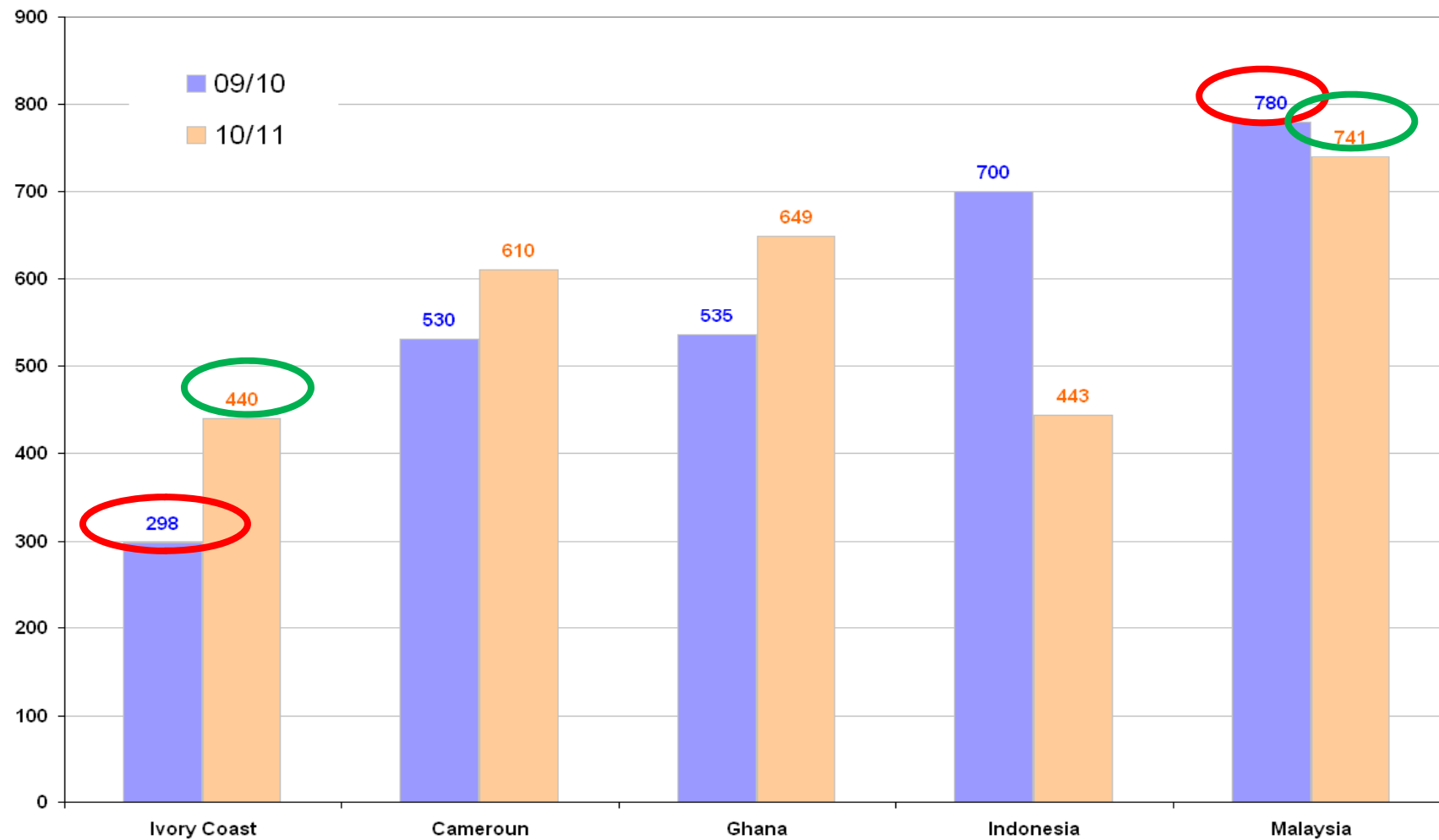


- ▶ Today: Certification will not increase the crop
 - ▶ Our customers want certification
 - ▶ BC will use QPP & Biolands as sourcing models
- ▶ Tomorrow: BC will use QPP and Biolands to improve yield per hectare



Increase via IC: Possible or not?

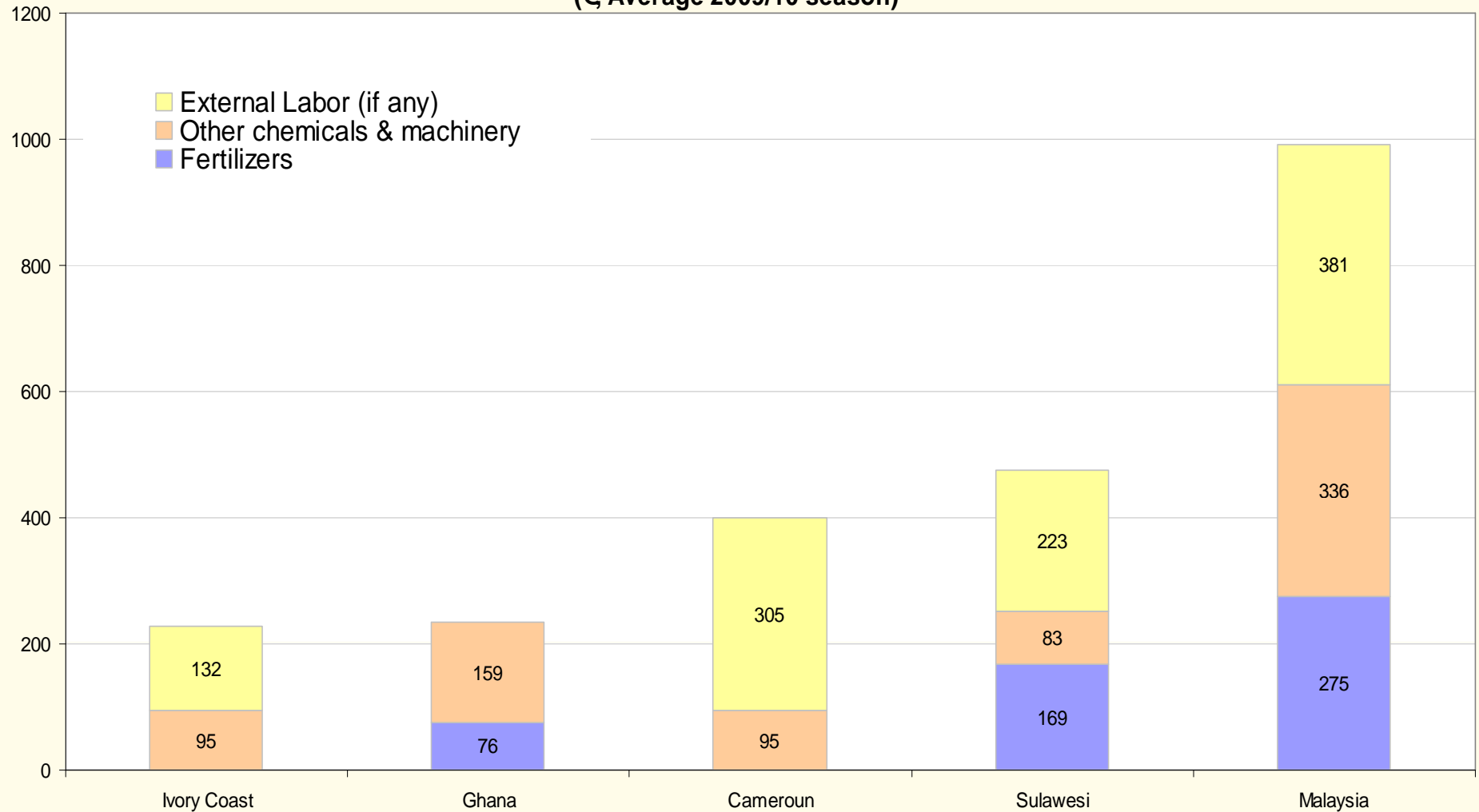
Estimated cocoa yields - Kg/Ha





Asian cocoa farms have greater input costs than in Africa, where most farmers apply little to no fertilizers

Cocoa farming cost per Hectare
(€ Average 2009/10 season)





Thank You