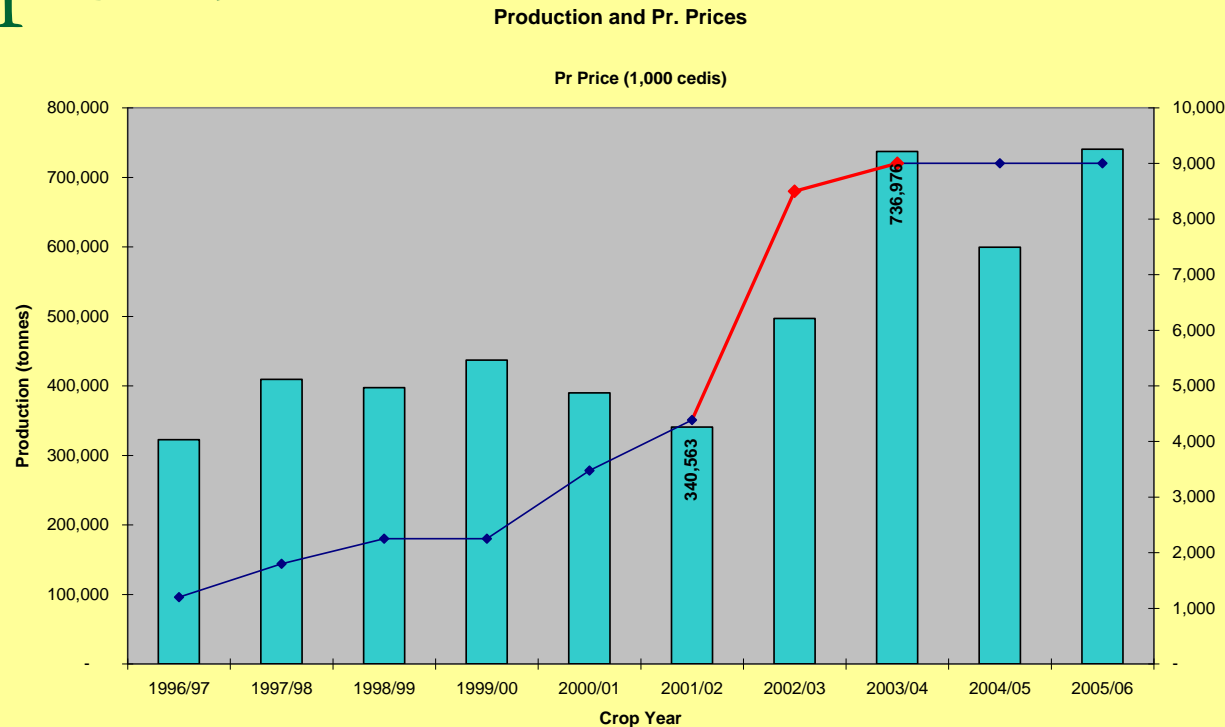

Drivers of Productivity Growth in Ghana's Cocoa Sector

Marcella VIGNERI
Overseas Development Institute - London

Production, Markets, and the Future of Smallholders
The Role of Cocoa in Ghana
Accra - November 19, 2007

The boom episode

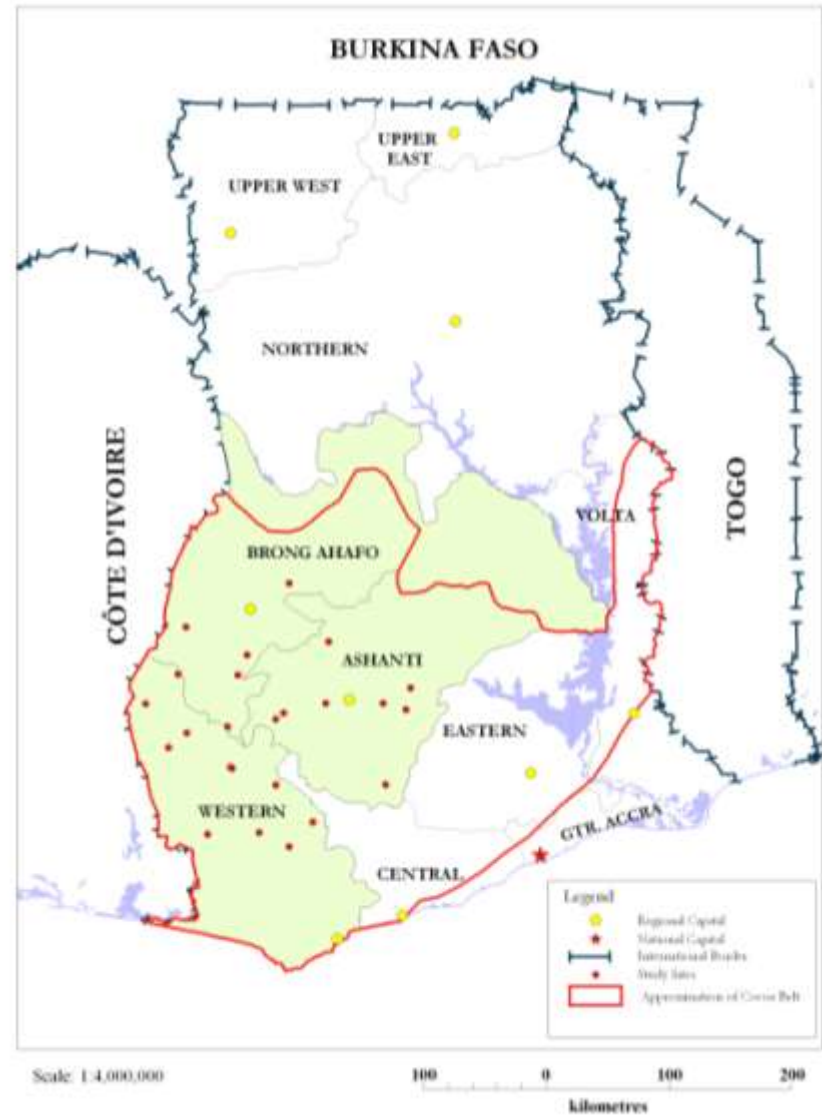
- Between 2001 and 2003 total production has doubled
- The producer price increase occurred in first two years



What has driven this boom?

Analysing Survey Data

- Two rounds of a panel survey carried out in 2002 and 2004 on 441 cocoa farmers (Oxford University)
- Close to the IC border (W)
- Southern BA (away from Savanna)
- Clusters in new (WS) and traditional (A) cocoa growing areas



The facts

Growth in these data does not reflect the extent of growth observed in aggregate – 33 percent

But changes in the data closely mirror changes in the aggregate

- ❑ Land under cocoa increased by 20 percent
 - ❑ Production per unit of land increased by 8 percent
-

The mechanics

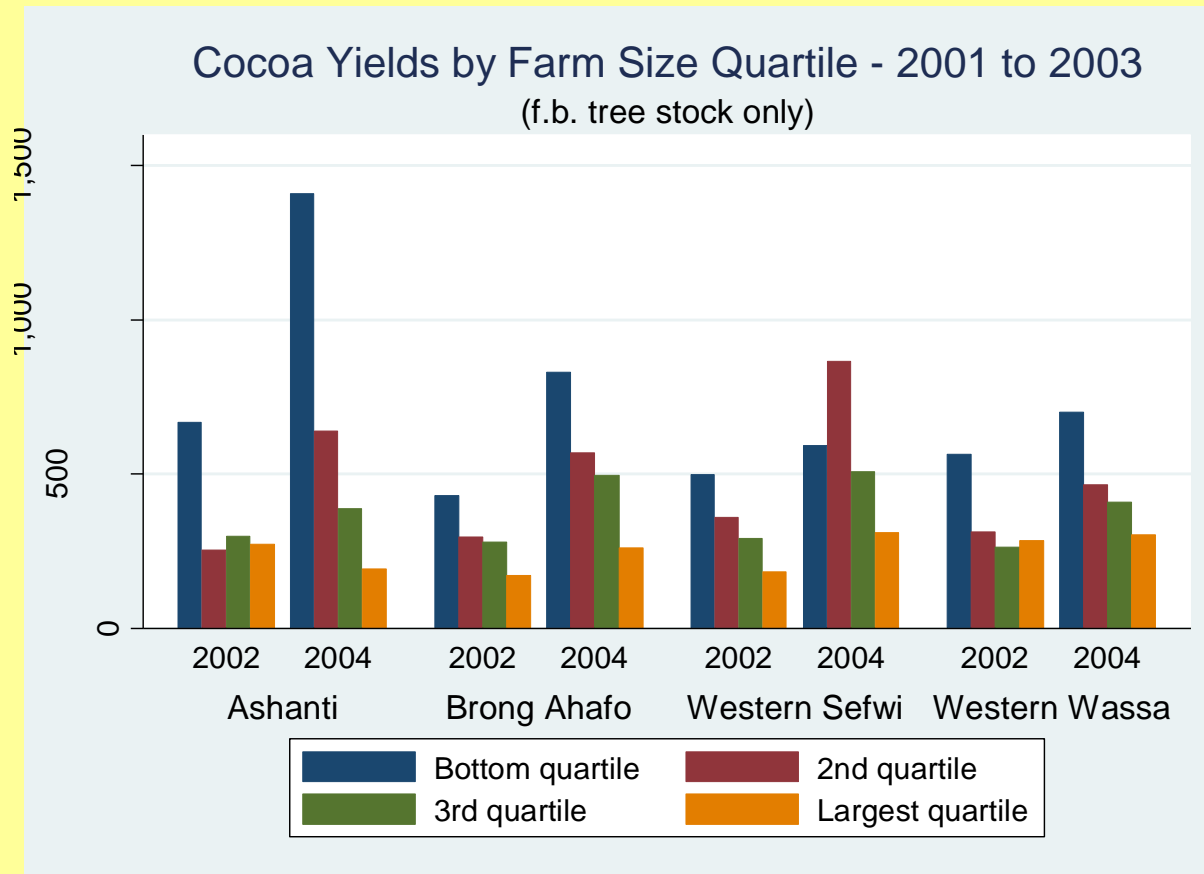
- Labour supply on cocoa has more than doubled:
 - This increase almost entirely driven by household labour

 - Fertiliser use has gone up by a factor of 10, and up to four times more farmers have used it on their farms

 - Nearly all farms were sprayed in 2003/04 (up from 81 percent in 2002)
 - on average of 4.22 spraying applications
 - of which 46 percent on carried out by the government
-

The role of land

(full bearing tree stock)



➤ Higher yields observed across all regions

➤ Strong evidence of greater productivity on smaller farms

What does quantitative analysis suggest?

- Labour productivity had 7 percent increase on yields
- fertilizer adoption affected productivity by 5 percent
- Substantial effect of spraying
 - virtually all farms revisited in 2004 reported substantially reducing share of land lost to black pod
- Good rainfall had bumper effect on yields across all regions

...however...

- Regional differences matter
 - production and yields on full bearing farms up mainly in Western Sefwi (2002 young tree stock coming into full bearing)



Bogyampa, Brong Ahafo: © R. Venugopal 2002

Policy Implications

- Fertilizer adoption increased production and productivity
- Spraying exercise (Government sponsored and owned) very effective

Message

Right incentives to farmers facilitate better farming practices

..but...what about long term incentives to sustain farmers?

Risks from protracting inaction

- Technology of production remains unchanged: largely based on use of labour (mostly households') and land (on the extensive margin)
 - Need effective incentives to promote rehabilitation of existing tree stock
-



Ekutuase, Ashanti: © R. Venugopal 2002

Thank you