

4C Online Seminar Series “Sustainable Coffee Day”

Coffee and Climate Change

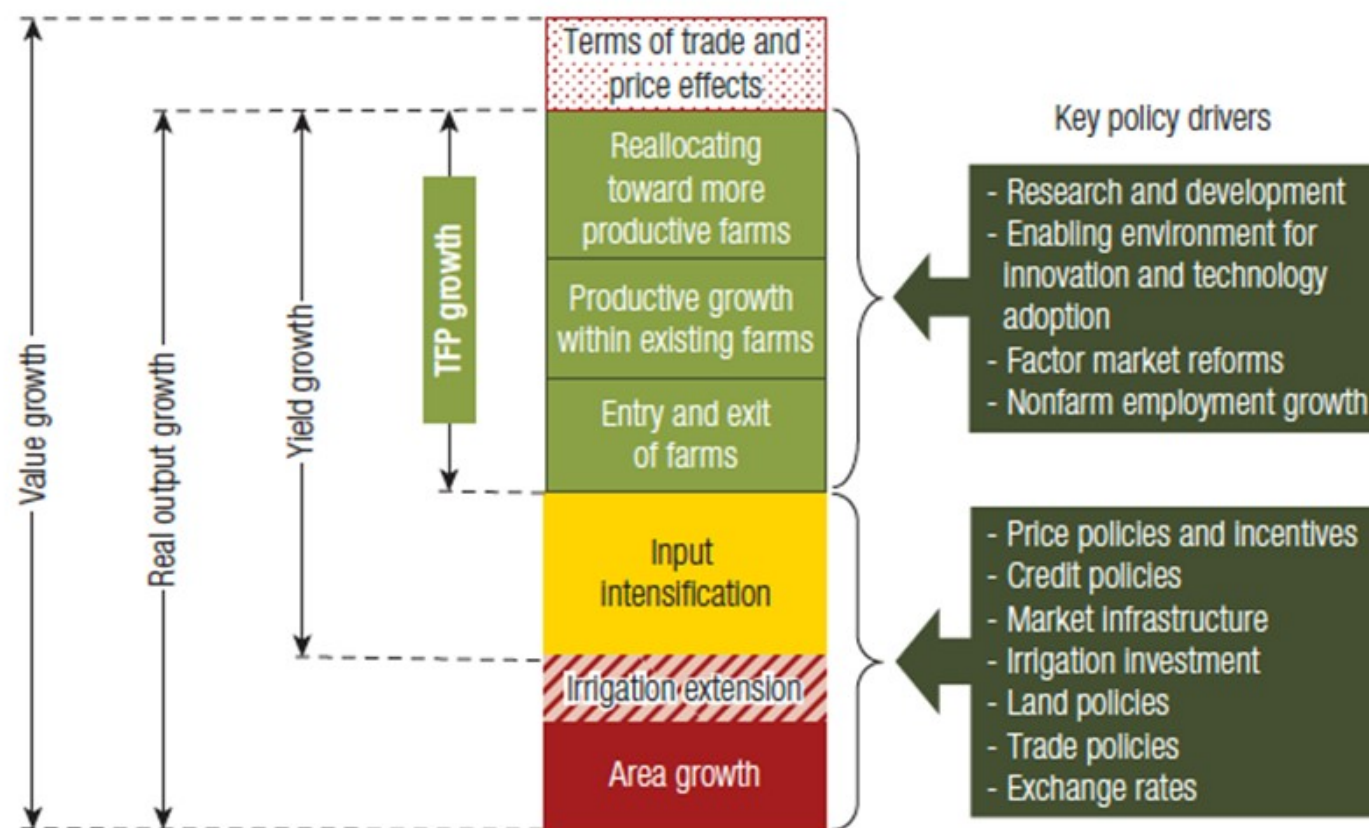
J. Vern Long, PhD – CEO, World Coffee Research



Tackling the climate crisis

- Focus on production systems & emissions
- Technology design that contributes
 - to both mitigation and adaptation
 - to economic viability for farmers and the industry

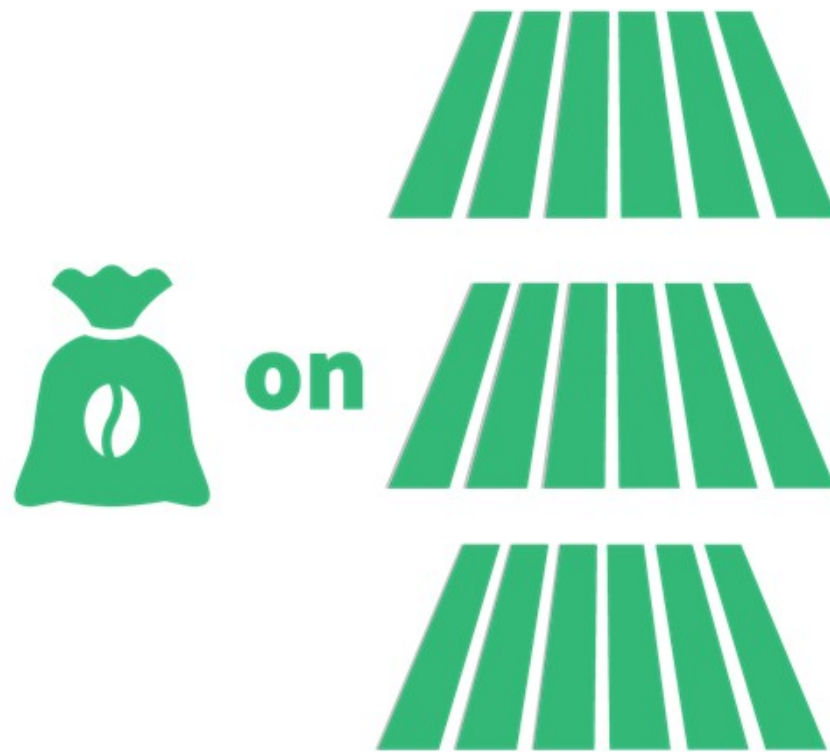
FIGURE 1.6 Decomposing Agricultural Economic Growth



Source: World Bank.

Note: TFP = total factor productivity.

Consequences of increased production via growth in land area



Land use change accounts for
~10% of total human-caused
GHG emissions (ploughing soil
and clearing vegetation).

*(GlobAgri-WRR model estimate, Searchinger
2018)*

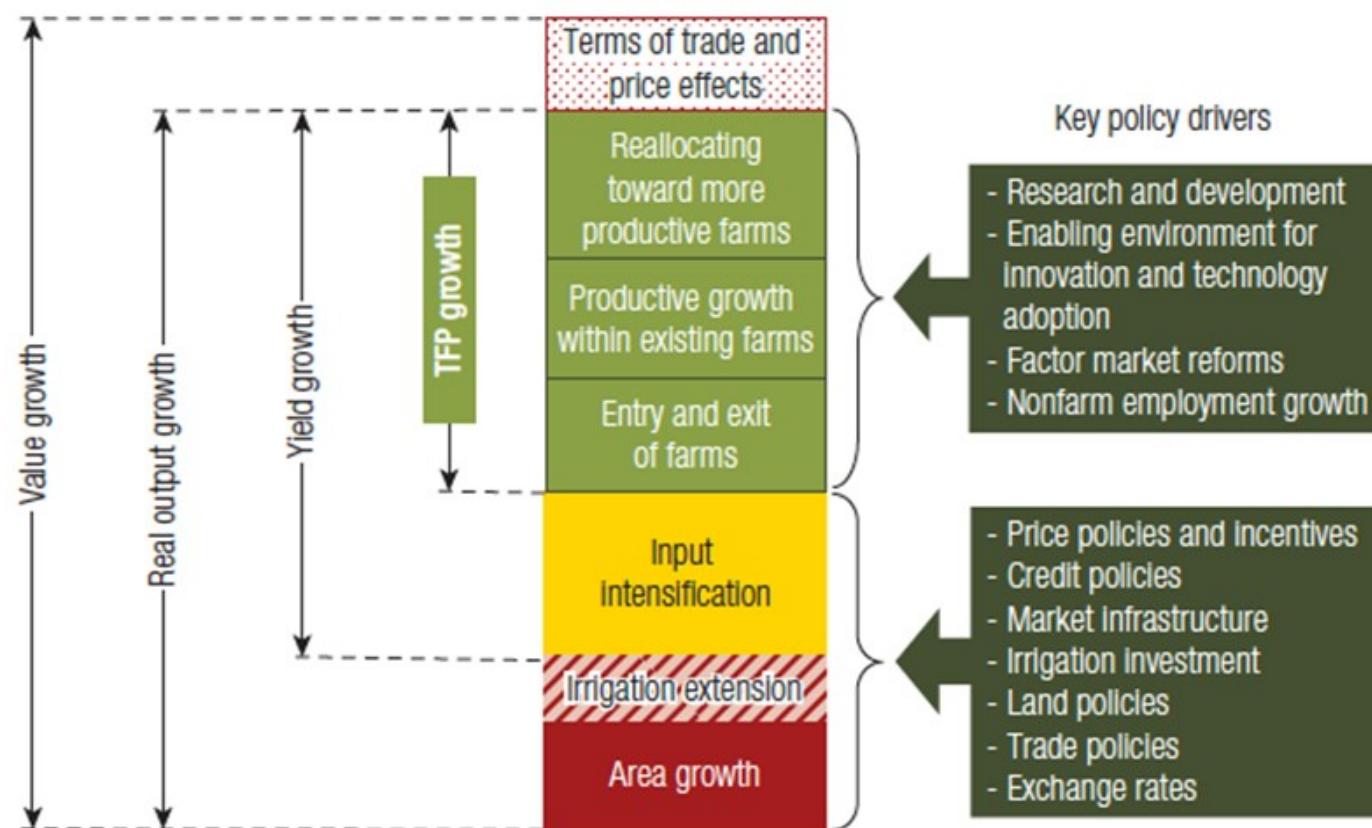
What we need to do...

More coffee



Less/existing land

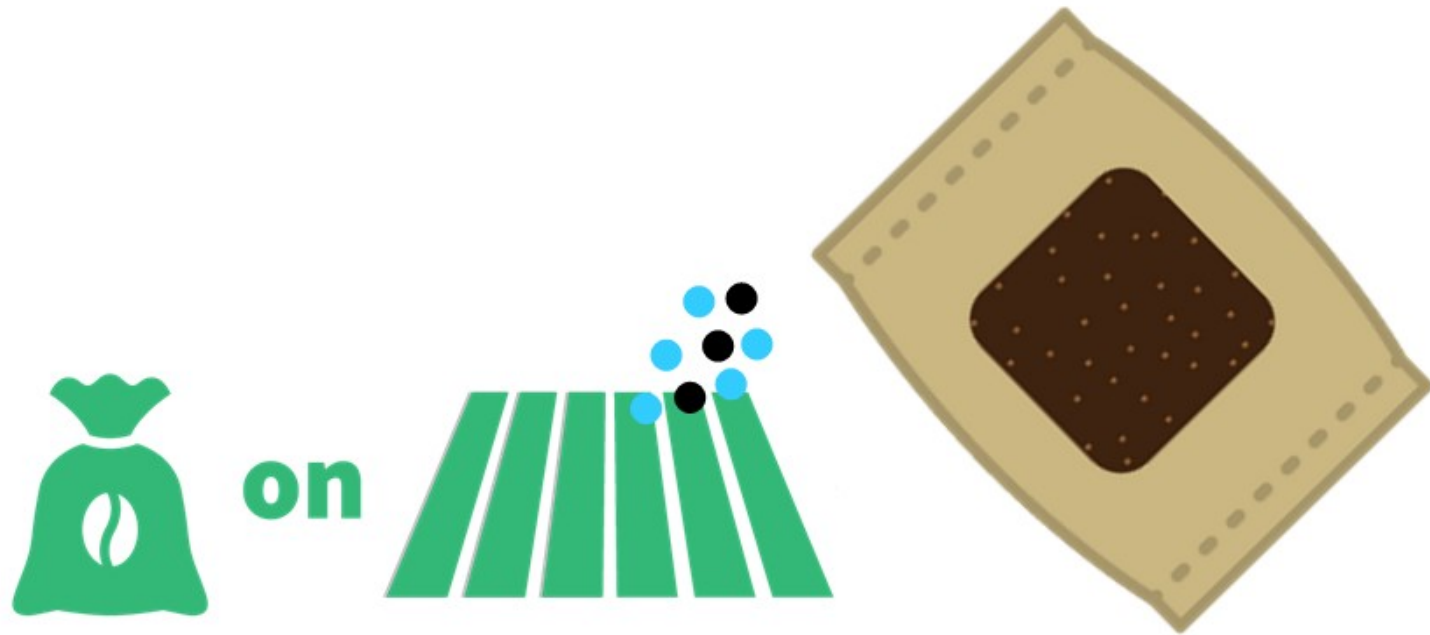
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Source: World Bank.

Note: TFP = total factor productivity.

Increase production via input intensification

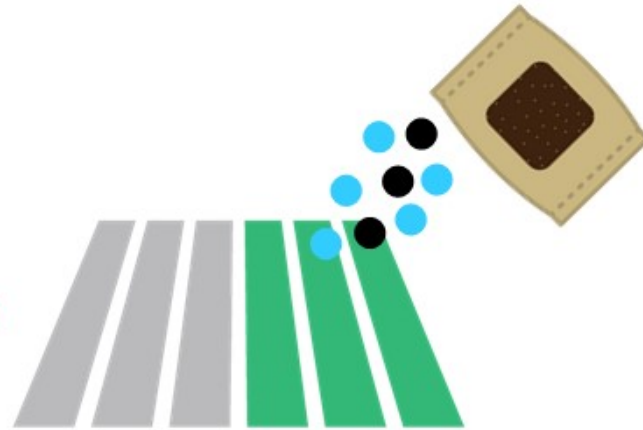


What we need to do...

More coffee



with



**More efficient
use of inputs**

What we also need to do...

More coffee



from



More productive, resilient varieties

And probably some shade...

More coffee



from



**Shade + more
productive,
resilient varieties**

Intentional technology design: holistic thinking

More coffee



with



**More efficient use of
inputs, shade production &
productive, resilient
varieties**

What is good for reducing emissions....
can be good for farmer's bottom line



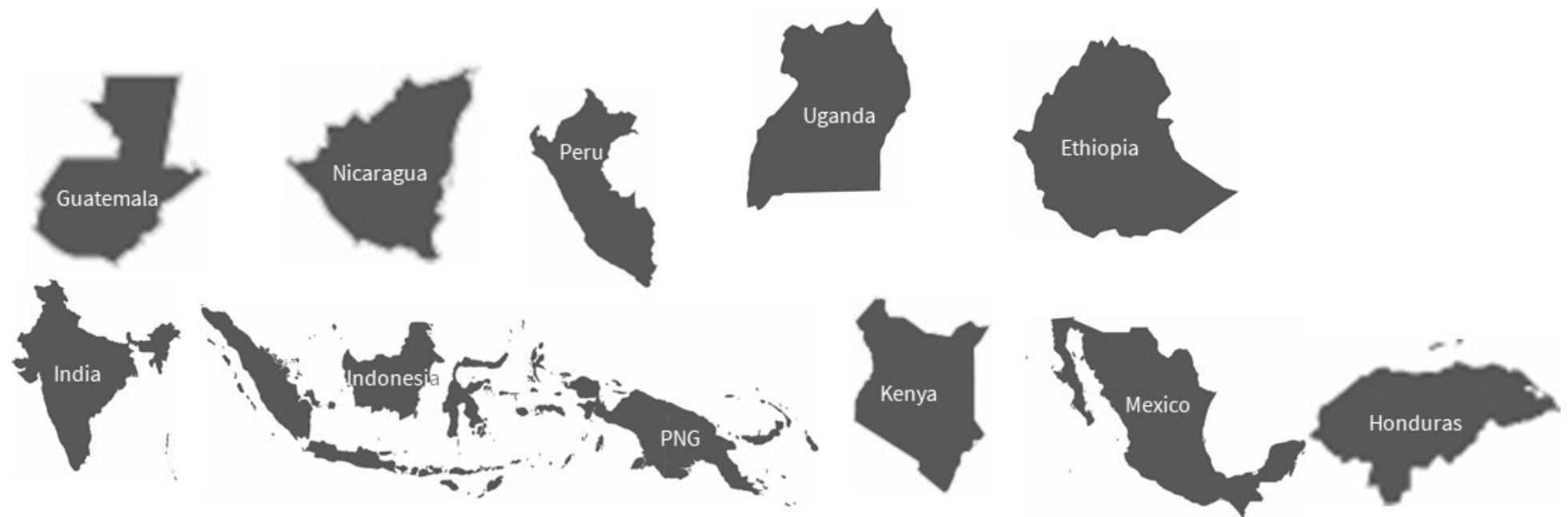
**More efficient use of inputs,
shade & productive, resilient
varieties**

Is it this simple?
It is a start. And we must.



**More efficient use of inputs,
shade & productive, resilient
varieties**

Many farmers producing efficiently and productively on existing land is good for national economies, good for managing GHG emissions, good for economic opportunity of rural populations, and good for differentiated coffee products in the market.





Our **mission** is to grow, protect and enhance supplies of quality coffee while improving the livelihoods of the families who produce it.



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WCR is a 501c5 nonprofit organization