Coffee GVCs:
International Comparative Research from Indonesia and China

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Overview of Presentation

- Introduction to the Indonesian coffee sector
- How is Indonesia inserted within the GVC for coffee?
- Expansion of coffee cultivation in China
- How is China inserted within the GVC for coffee?
- Policy implications for Indonesia

The Input-output structure for Indonesian Coffee

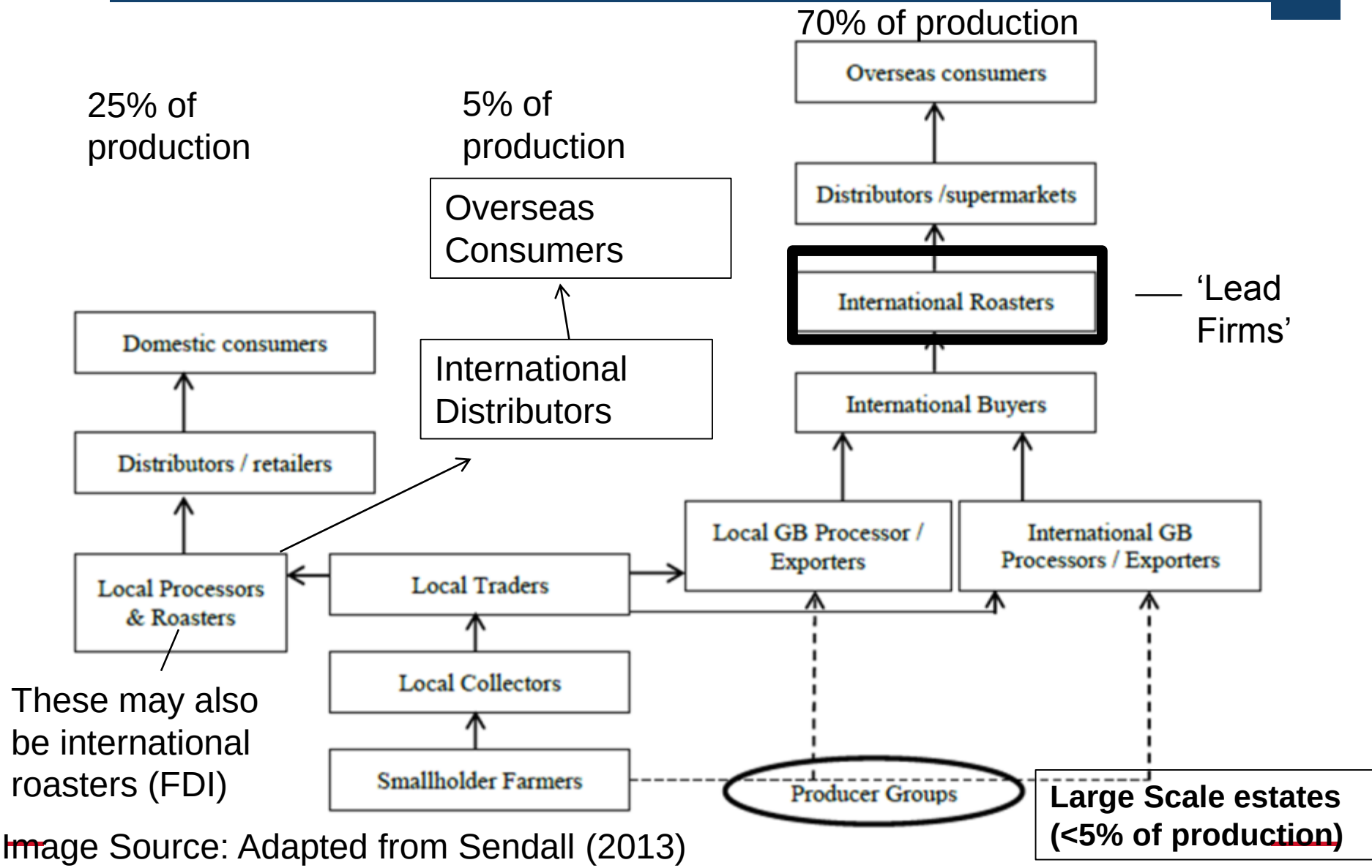
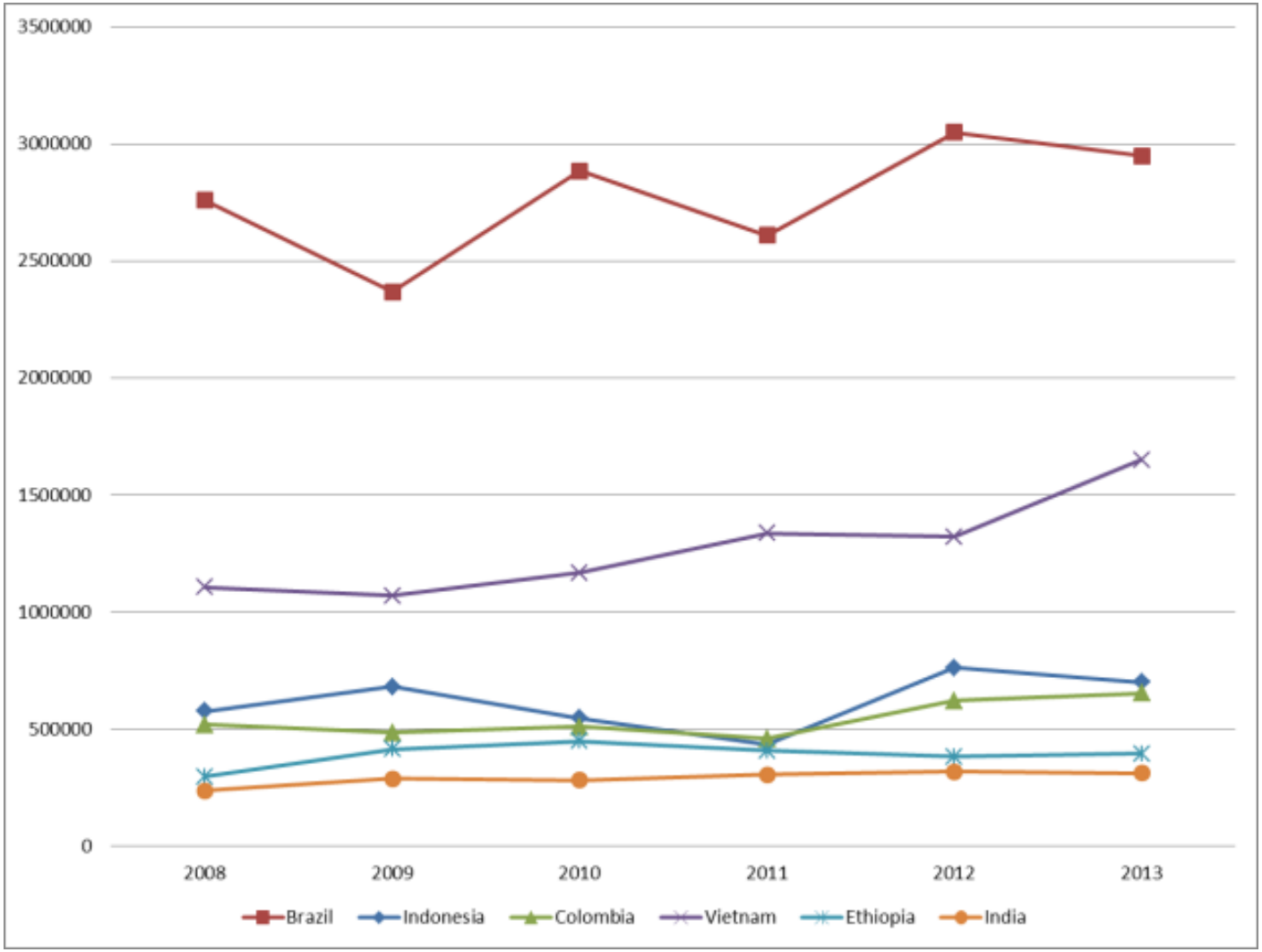


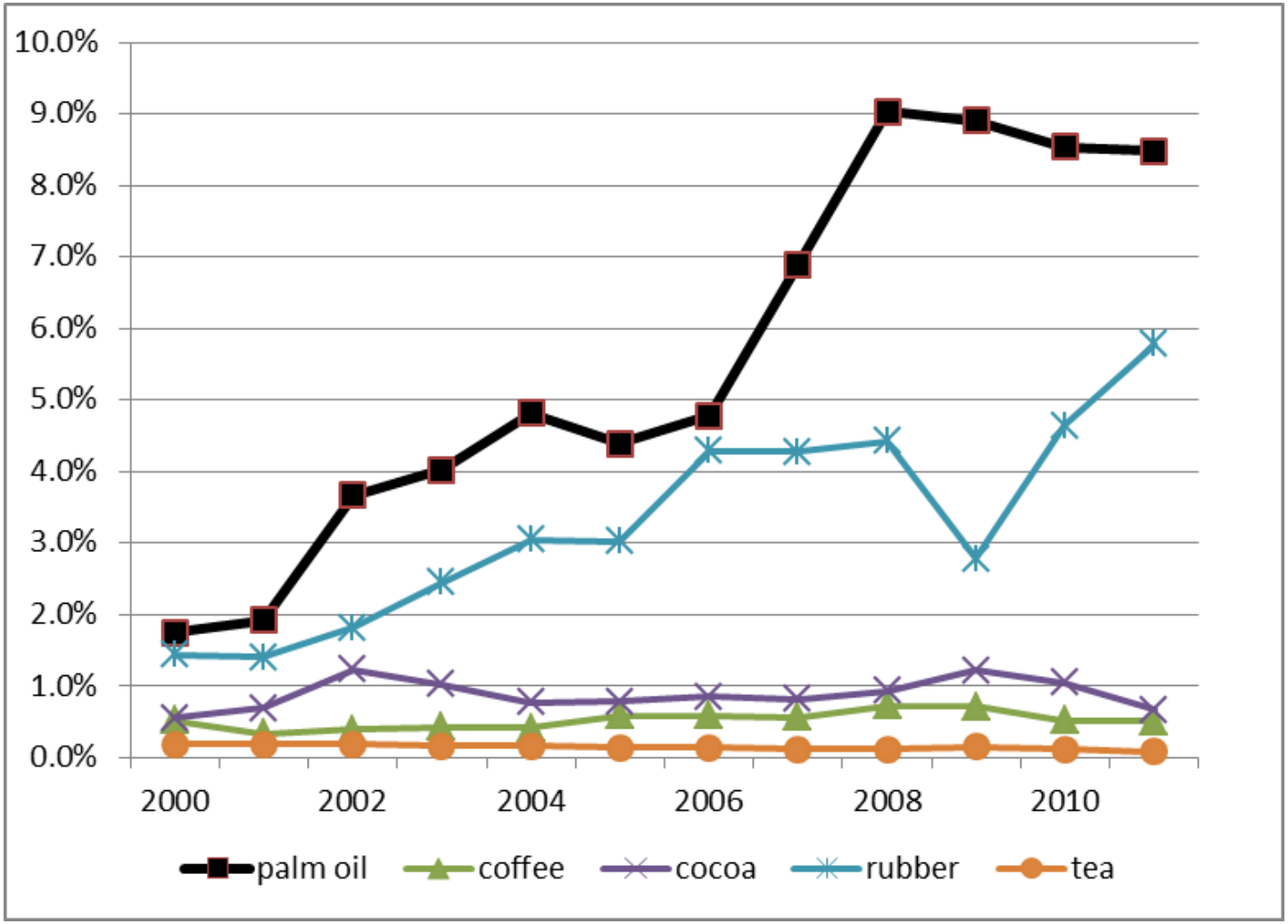
Image Source: Adapted from Sendall (2013)

Indonesia: A significant coffee producer



Source: ICO, 2014, tonnes /year

Coffee is a relatively minor contributor to total exports earnings in Indonesia (but still worth $1billion)

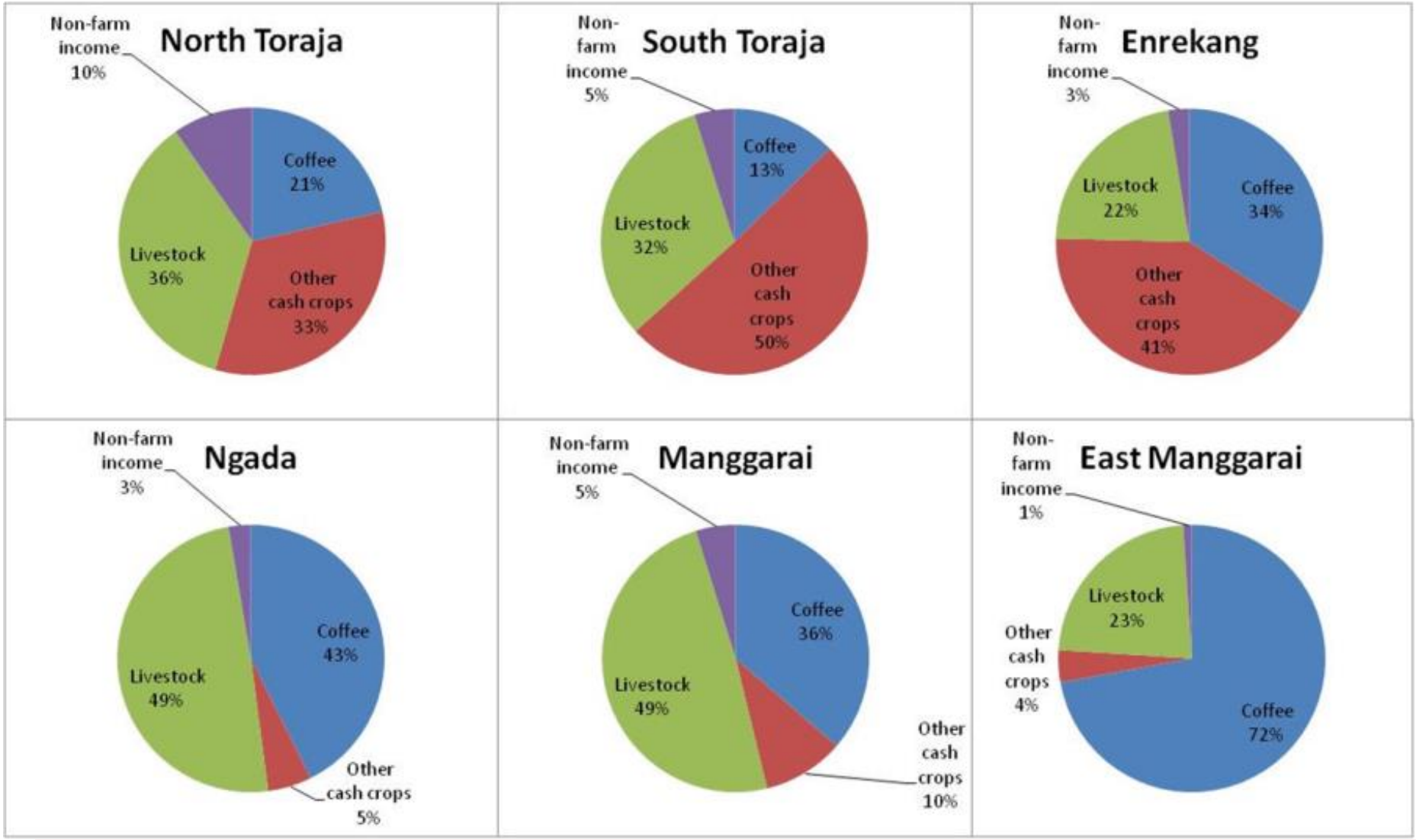


› Source: UNCOMTRADE (2014). % of total export value

But critically …… it is an important source of livelihoods

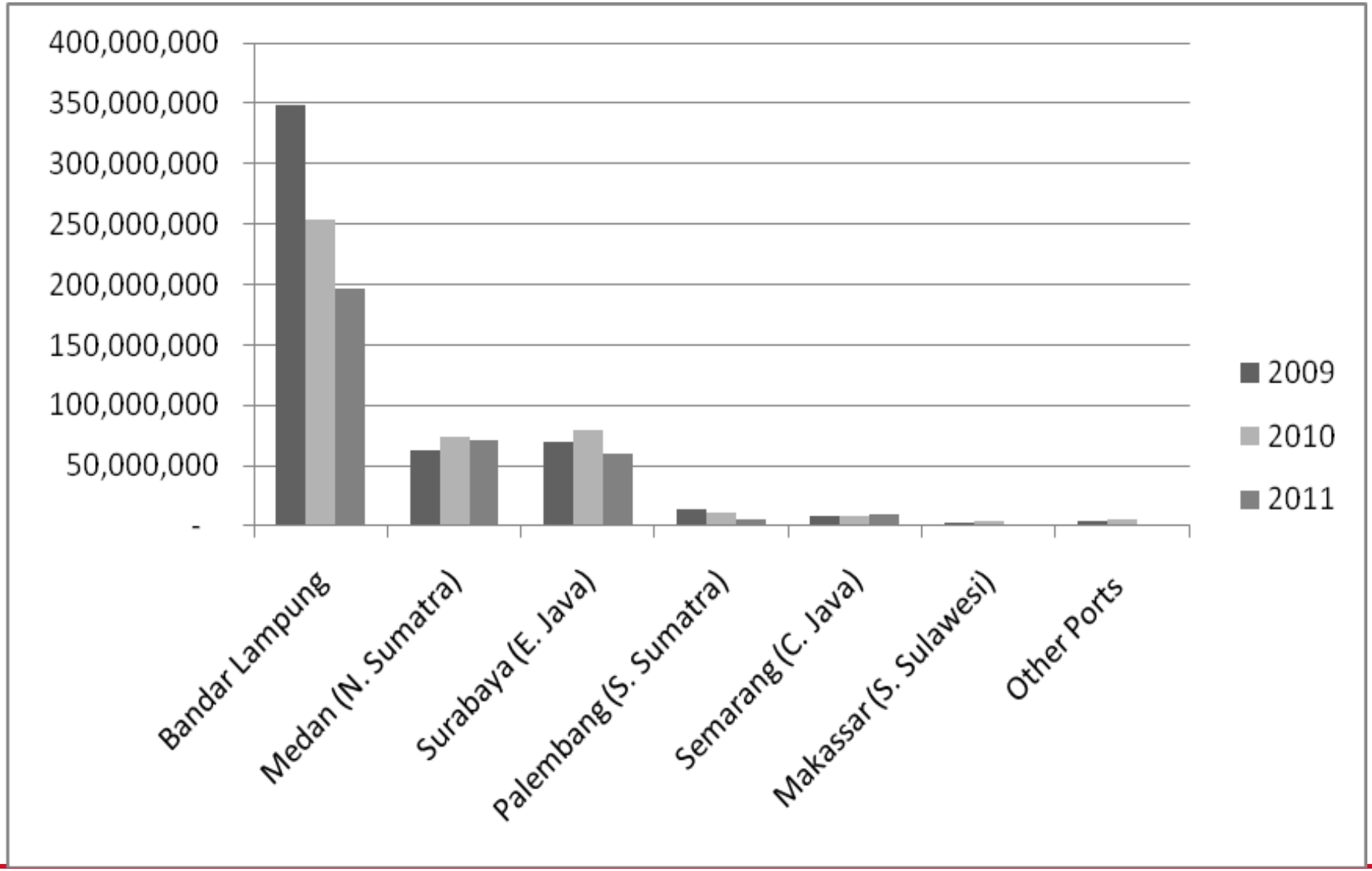
› Maybe 2 million coffee farm households spread across Indonesia

Although coffee is often part of a diversified livelihood farm strategy

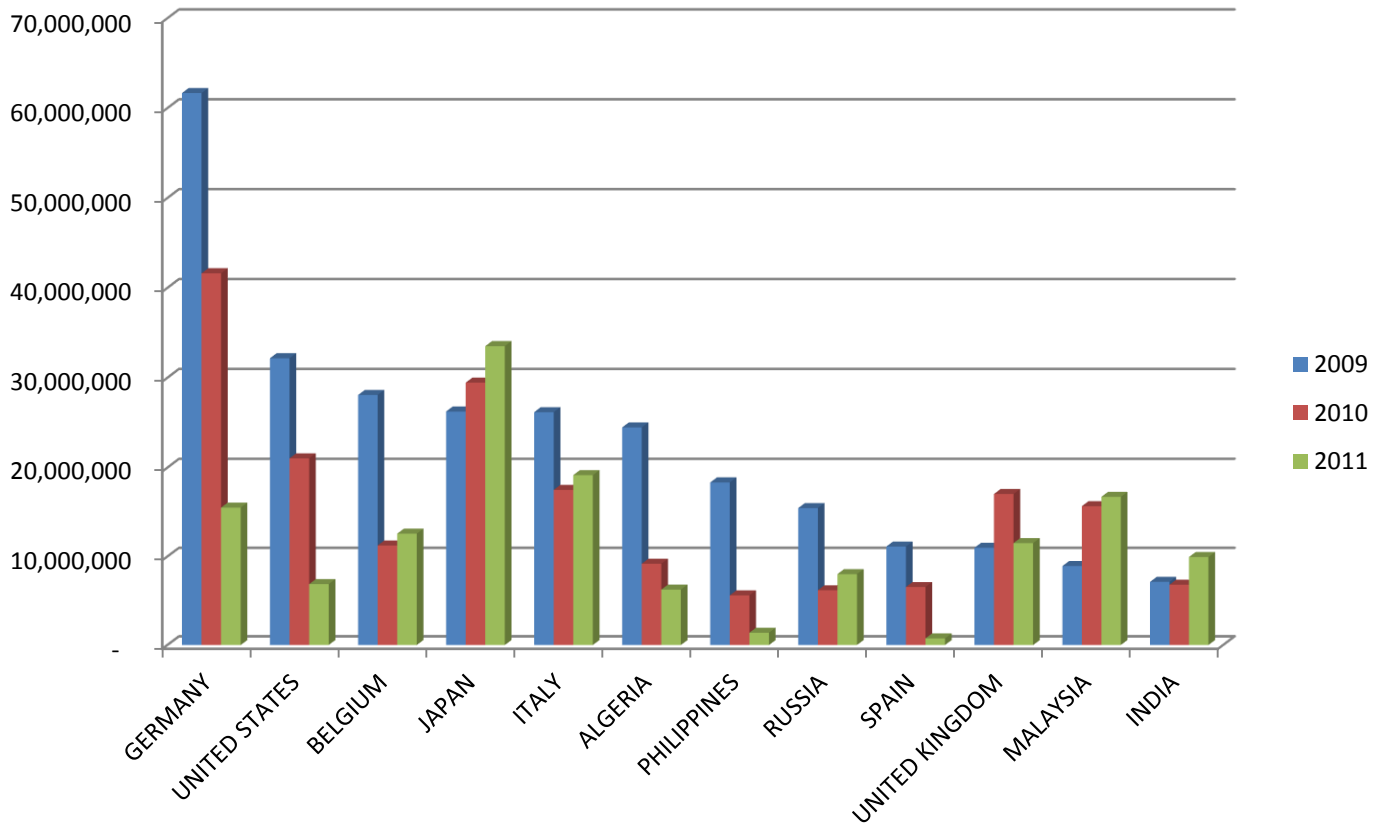


Source: Neilson et al, 2010

Indonesian coffee geography (based on export data)

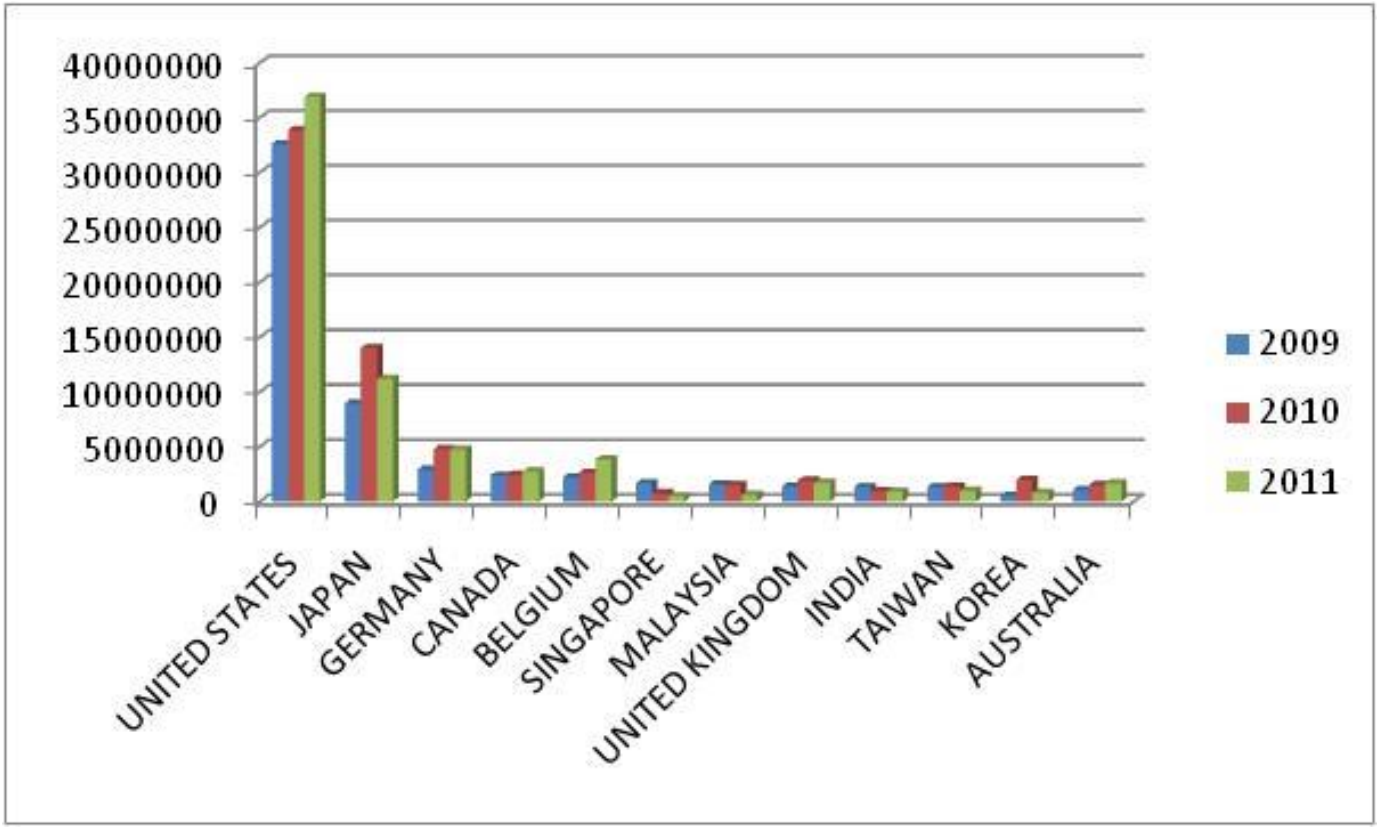


Exports from Lampung (kg/year)



- Robusta = bulk, undifferentiated 'commodity' coffee
- An apparent decline in exports to the USA and Europe
- Are emerging markets (India, Russia, Morocco, Philippines, Malaysia, China?) increasingly important to Indonesian Robusta?

Exports from Medan (mostly Arabica)



- Indonesian Arabica is a specialty product
- Markets are more stable and are dominated by established coffee consumers
- Average export prices to the USA in 2011 were $6.6/kg (for Lampung, it was $1.93/kg)

Lead firms are active along the entire value chain

- Lead Firms (roasters) ‘govern’ the chain by dictating the conditions upon which other actors must comply in order to participate,
- This is done through various sourcing policies, codes of conduct, quality standards, sustainability programs, and demands for certified products,
- The strategies and policies of these firms are increasingly impacting on the lives of Indonesian coffee farmers.

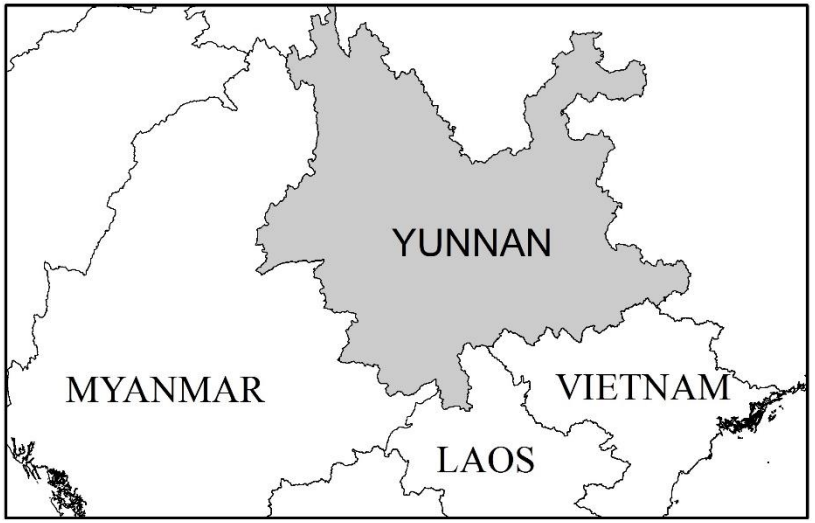
C.A.F.E. Practices

UTZ Certified
Better farming
Better future

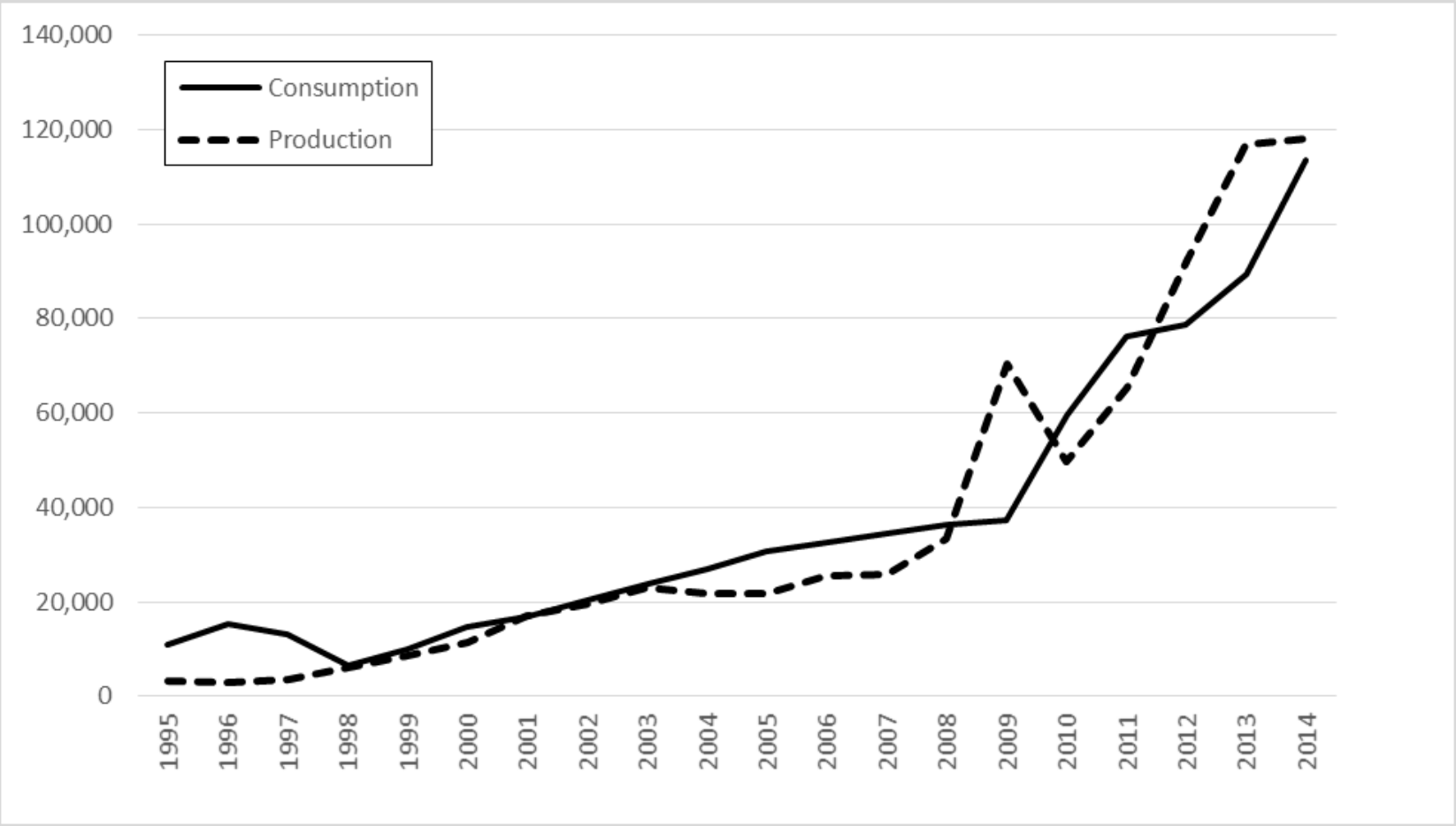
COFFEE MADE HAPPY
Mondelēz International

MASTER BLENDERS
1753

Comparative Study: Coffee in China

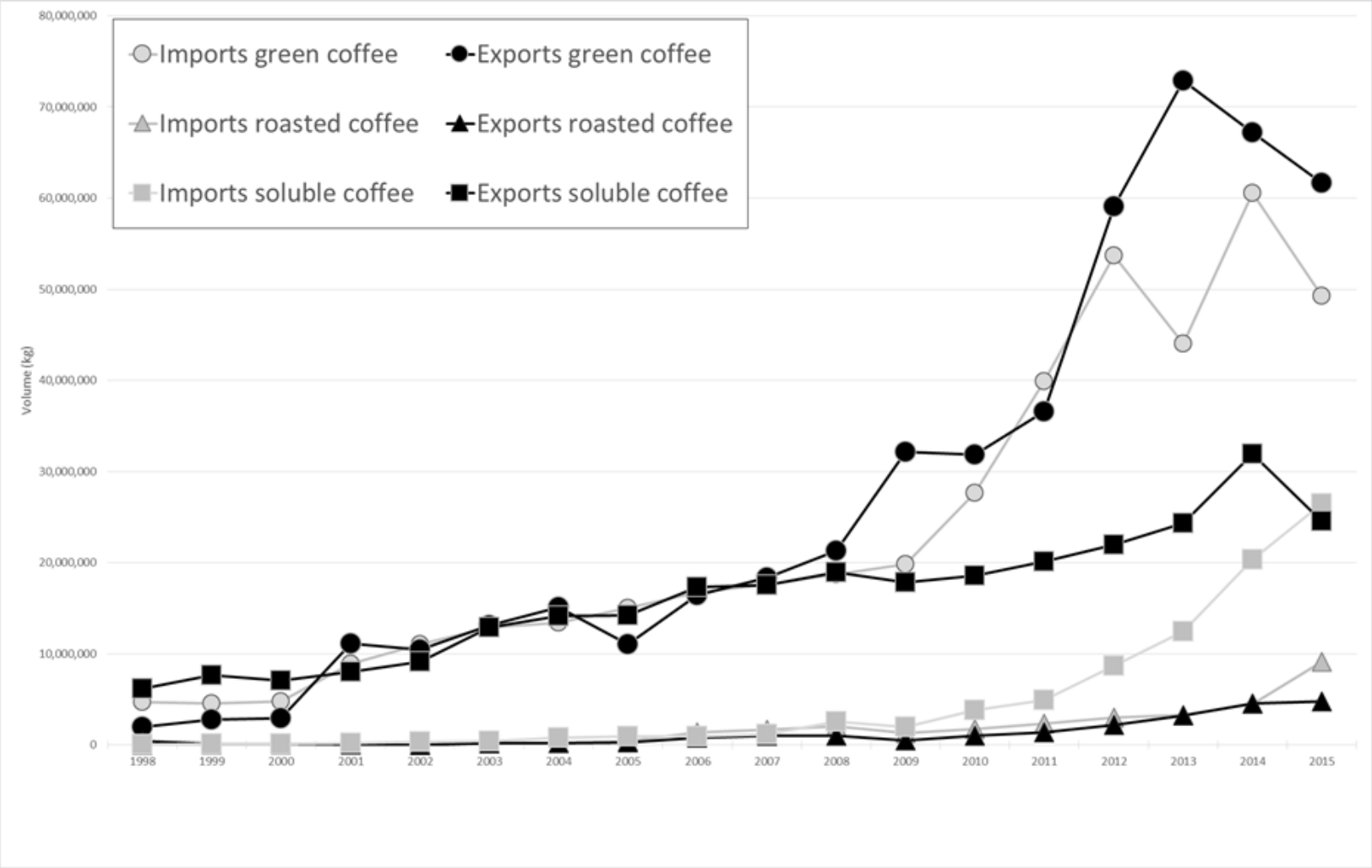


Estimated coffee production and consumption in China (1995-2014)



Data sources: FAO, 2017; ICO, 2015

China's trade in coffee products (volume) from 1998-2015



(UN Comtrade, 2017)

Lead firms drove China's entry to coffee sector

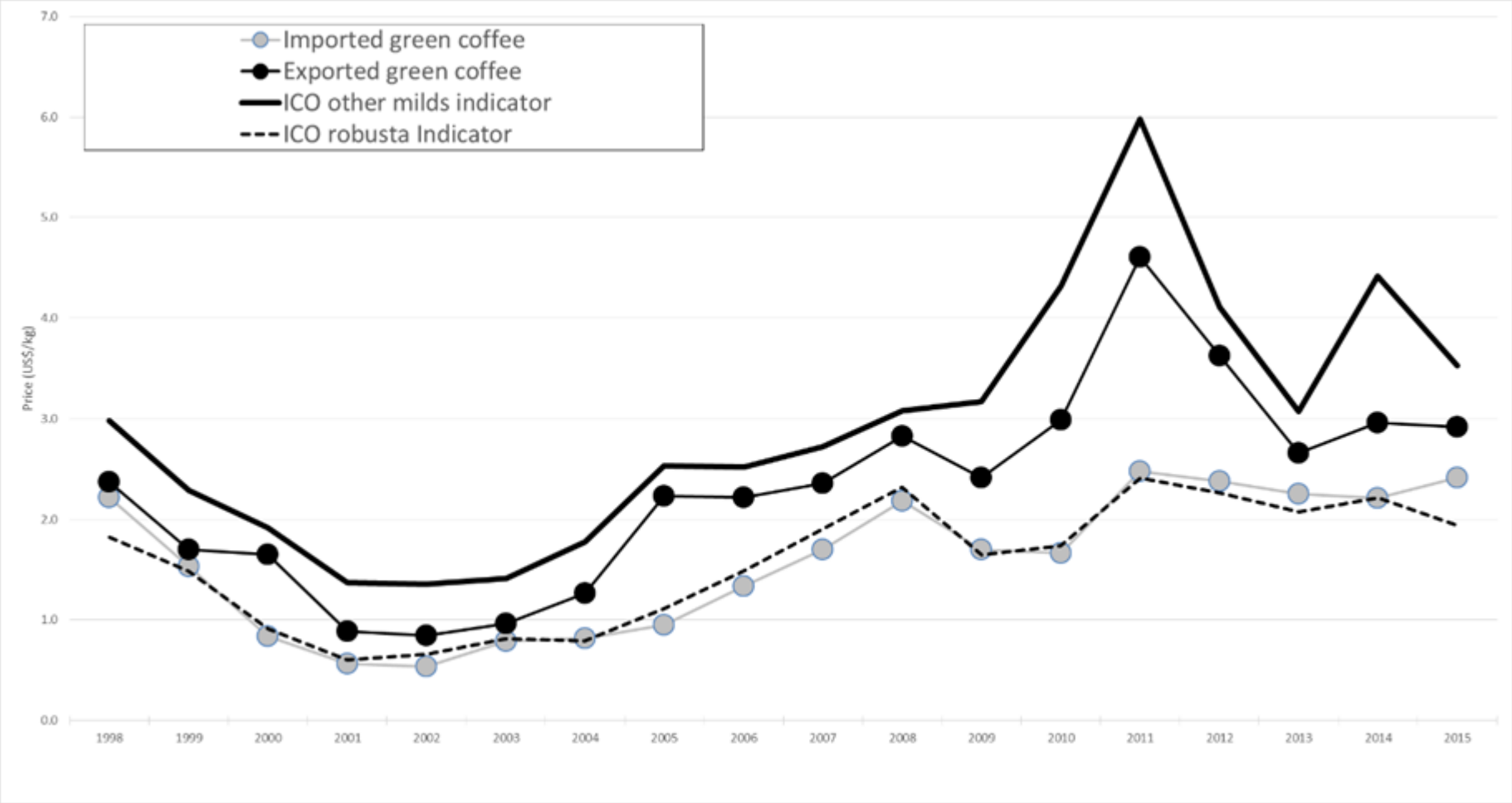
- 1988: Nestle established an instant coffee factory in Guangdong Province,
- 1991: Nestle established an office in Kunming, and by 1997, had established agricultural assistance services across Yunnan and provided training for more than 16000 farmers
- Nestle has since been the largest single buyer and performed a pivotal role in stimulating regional production.

- Starbucks followed in 2009, through a JV,
- By 2017, Ecom Agroindustrial, Neumann (indirectly), Louis Dreyfuss, and Olam, were actively sourcing coffee from Yunnan.

Expansion of production

- The Yunnan government planned, in 2010, to expand the plantation area to 1 million mu by 2020 (it actually surpassed this in 2013)
- Rapid expansion due to relatively high market prices for coffee from 2009 (coinciding with a serious outbreak of leaf rust in Colombia) AND maximising opportunities from within the value chain

Average prices of China's trade in green coffee relative to ICO indicator prices



Data source: UN Comtrade (2017); ICO (2017b)

China's major coffee trading partners (based on 2011-2015 average values)

Imports			Exports		
Green Coffee	**Roasted Coffee**	**Soluble coffee**	**Green Coffee**	**Roasted Coffee**	**Soluble coffee**
Vietnam	USA	Malaysia	Germany	Philippines	Hong Kong
Indonesia	Malaysia	Indonesia	USA	Hong Kong	Rep. Korea
Brazil	Italy	Rep. Korea	Belgium	Vietnam	Vietnam

Opportunities for upgrading (Indonesia)

There are 3 primary modes of upgrading (Humphrey & Schmitz, 2002):

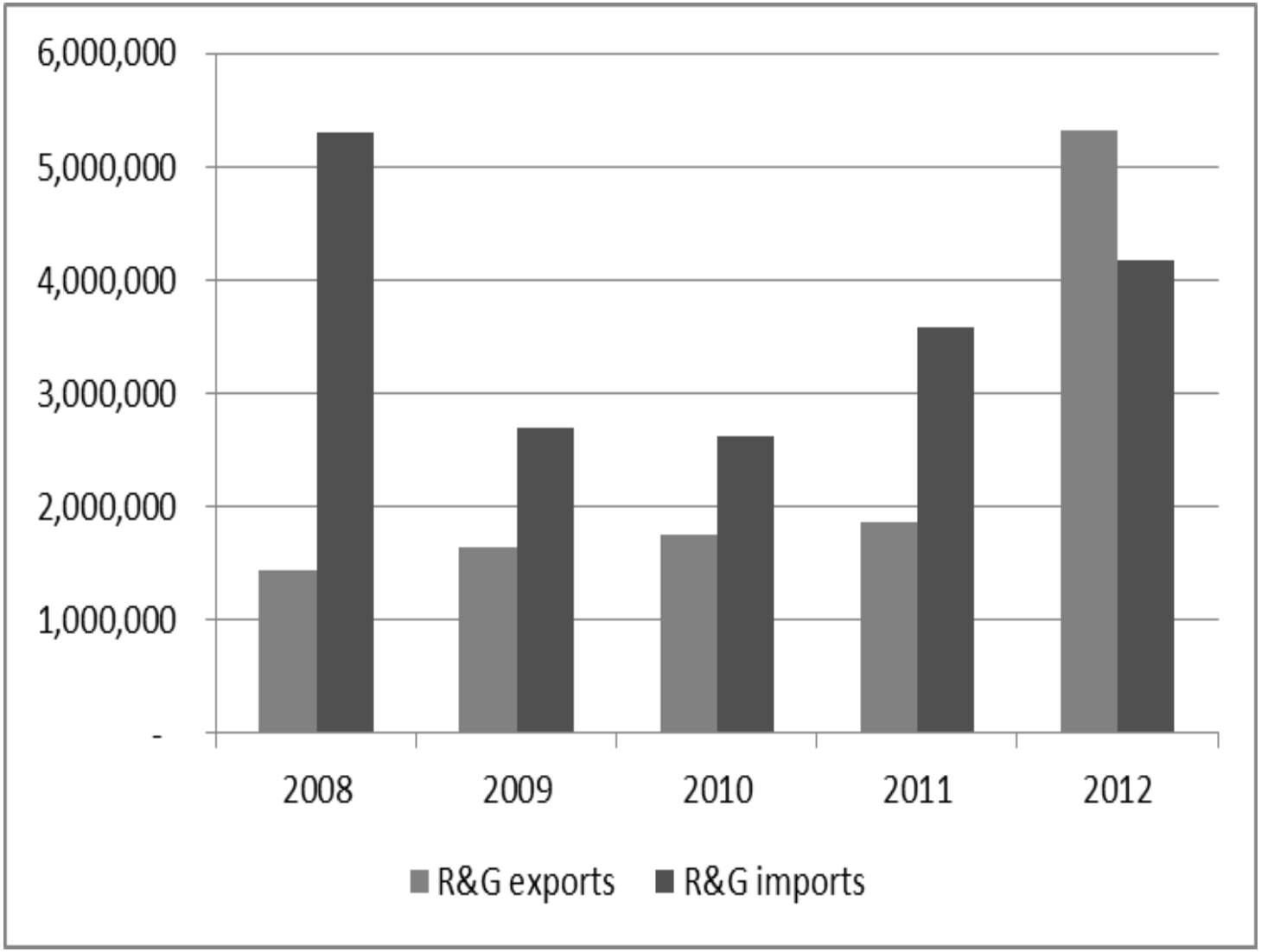
1. Functional upgrading: taking on new functions in the value chain (processing coffee beans instead of exporting green beans)
2. Product upgrading: moving into new (higher-value) product lines such as specialty coffees, or organic coffee
3. Process upgrading: producing the same product more efficiently and more profitably (eg. Using precision-farming and improved technologies to produce green coffee more profitably or introducing new technologies to the roasting process)

Functional Upgrading (or downstream processing)

- Can Indonesian firms successfully upgrade by processing more beans?
- Coffee can be processed into a variety of products:

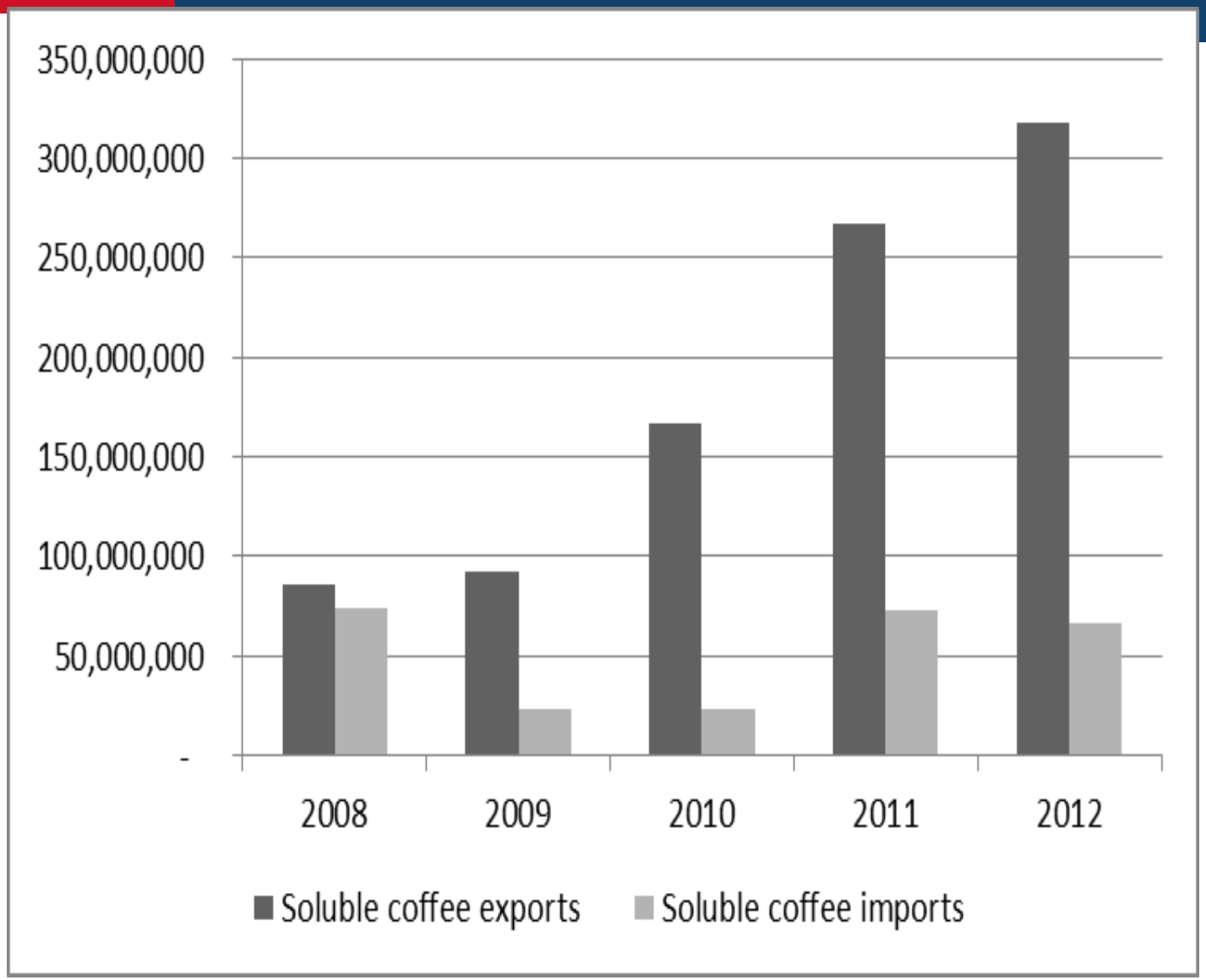
1. Roast and Ground (R&G) or just roasted coffee (simply roasting the beans)
2. Soluble coffee – instant coffees
3. 3-in-1 coffee (pre-mixed with milk and sugar)
4. Ready to drink products (eg. iced coffee)

Indonesia is not a significant importer or exporter of roast & ground coffee (+/- 500ton/year)



In USD (HS Codes 90121 and 90122). Source: UnComtrade

Indonesia is increasing its exports of soluble coffee products



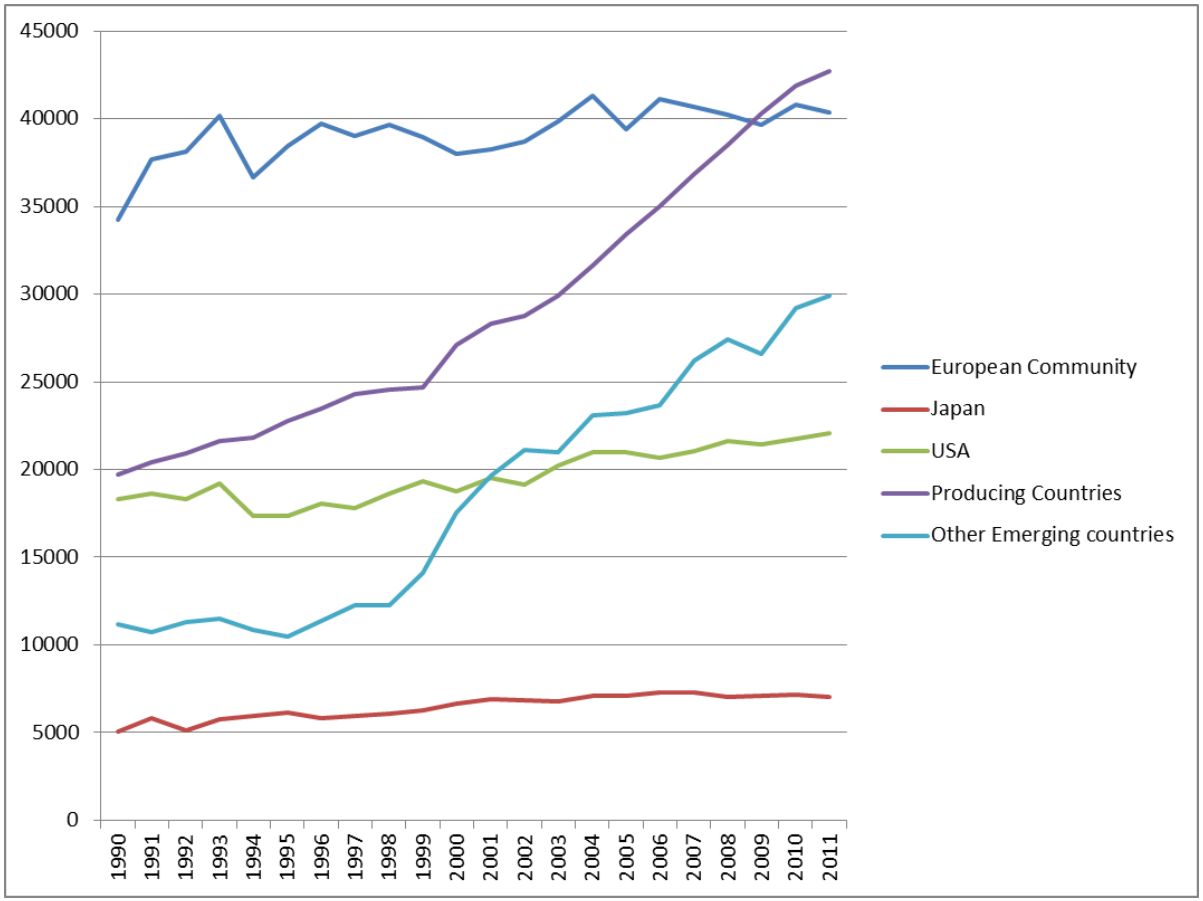
In USD (HS Codes 210111 and 210112). Source: UnComtrade

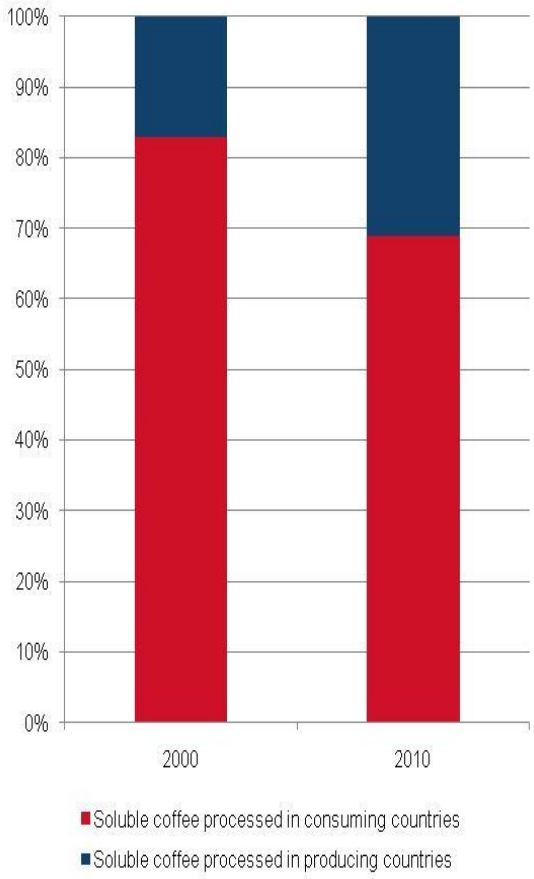
Export markets for Indonesian Soluble coffee are primarily in Asia (2012 data)

	‘000 USD
Philippines	223,729
Malaysia	37,812
Singapore	10,841
Vietnam	7,070
China (inc. Hong Kong)	6,670
Thailand	5,634
East Timor	4,414
Japan	3,130
United Arab Emirates	2,100
Pakistan	1,149
Other Countries	14,746

(HS Codes 210111 and 210112). Source: UNComtrade

Export markets in producing countries and other emerging countries are expanding – opportunities for Indonesian processed coffee?





Source: Compiled from ICO (2013)

'Global Coffee Consumption'. Source: Compiled from ICO (2014). 'Other Emerging Countries ' refers to all other markets (includes the former Eastern Bloc, North Africa and much of non-tropical Asia)

Challenges for domestic processing

- Freshness: quality can deteriorate soon after roasting
- Blending: to ensure consumer uniformity, roasters will blend coffees from around the world (cannot rely on 1 origin)
- Market knowledge: roasters need to be very sensitive to the changing needs of their customers – this works best when spatially proximate
- Trade protectionism: Continued tariffs on processed coffee imports (EU, Japan?)
- Transport Costs: Much higher for roasted coffee especially if just-in-time.

1. Domestic processing offers potential in the soluble and Ready-To-Drink markets
2. Domestic processing is likely to affect farmer livelihoods less than product upgrading
3. Policies to support domestic processing need to recognise the different consumer markets so that specialty growers are not disadvantaged

Product Upgrading – Quality Improvement

- Value can also be added within Indonesia by improving the quality of green beans sold into both the domestic and export markets,
- Growth in the international specialty coffee market has provided new opportunities for coffee smallholders in Indonesia to participate in these relatively high-priced markets
- The per unit value of higher quality specialty coffee sold as green beans may even be higher than for processed soluble coffee
- During 2011, average export prices to the United States for Arabica coffee from Medan were $6.6/kg, compared to only $1.93/kg for Robusta coffee from Lampung

Over to you

- How can an understanding of Global; Value Chains (GVCs) help to inform development and development policies in Indonesia?