

# Global Tea industry dashboard

(1961 - 2023)

How production growth, trade dynamics, and gender equity shape the resilience of the global tea economy

Production overview

Production History

Global trade dynamics

Value chain & export reliance

Farmer vulnerability

Gender equity & Fairtrade

Resilience equation

How to use  
Looker  
dashboard ?

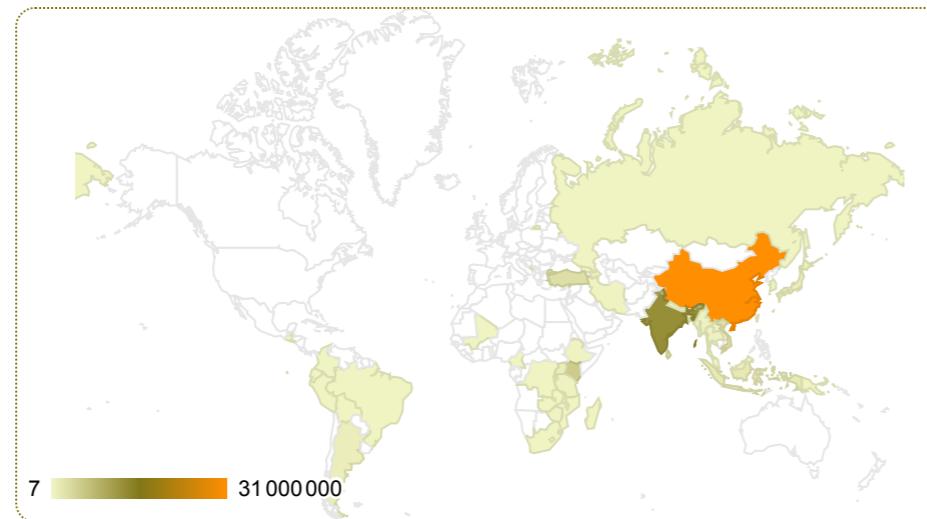
Data : FAO, UNDP, Fairtrade, WFTO, rainforest, Country's Tea board from 1961 - 2023

Tools : Looker Studio, Python, plotly, Google sheets

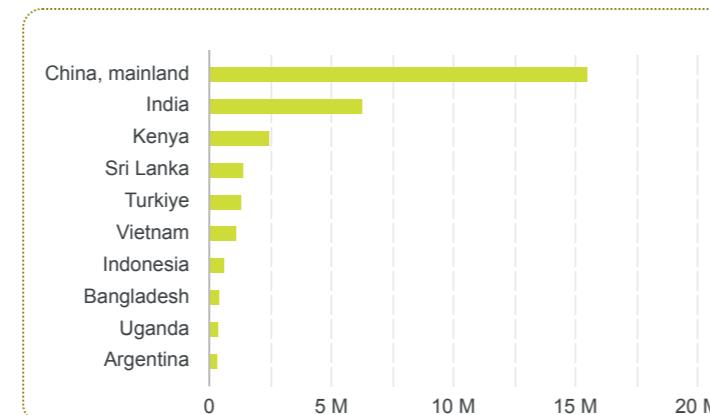
Country	Production (t)	Yield (kg/ha)	Exportation (\$)	Average farmer price (\$/t)	Fairtrade %
51	693,1 k	-	51,2 M	4,1 k	16,8

Growth without stability: Tea output surges while smallholders struggle income volatility

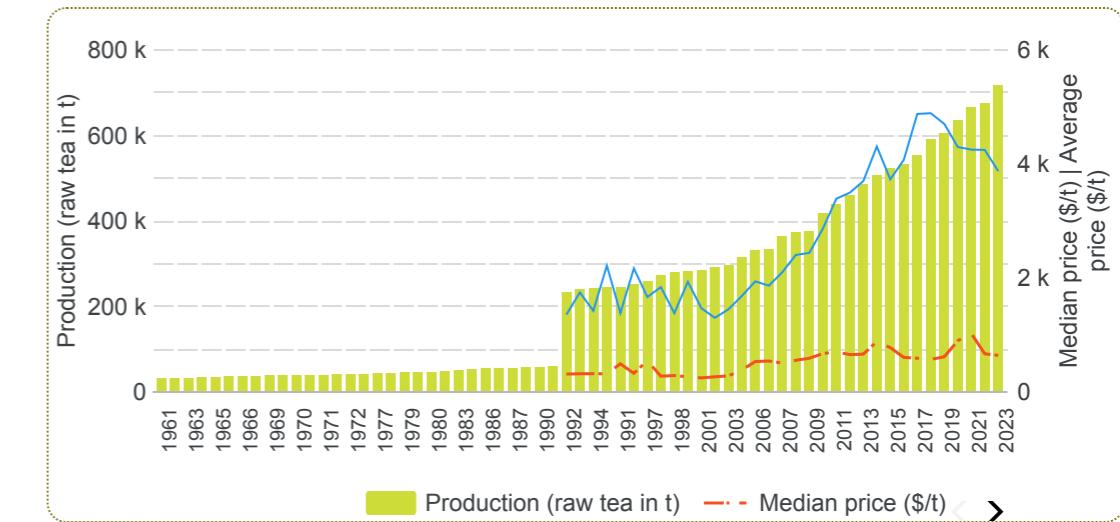
China, India, Kenya, Sri Lanka : huge production (t) & Area (ha)  
Türkiye & african farmers : higher yield (t/ha)



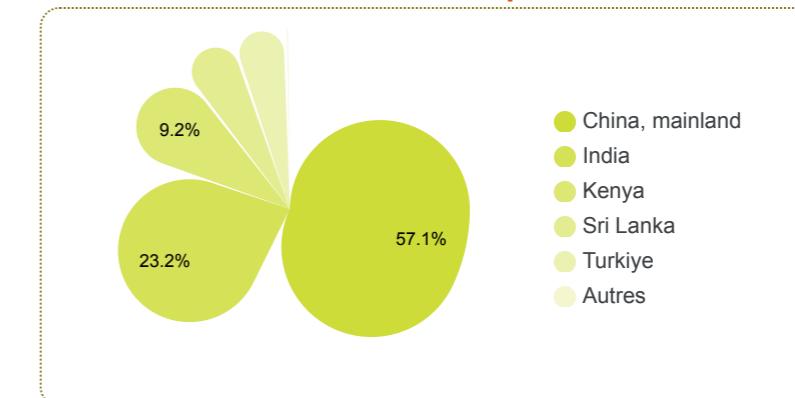
Top 10 producers (t)  
China widely dominate



Yield rose sharply after 1990  
Smallholders face unstable farmgate prices

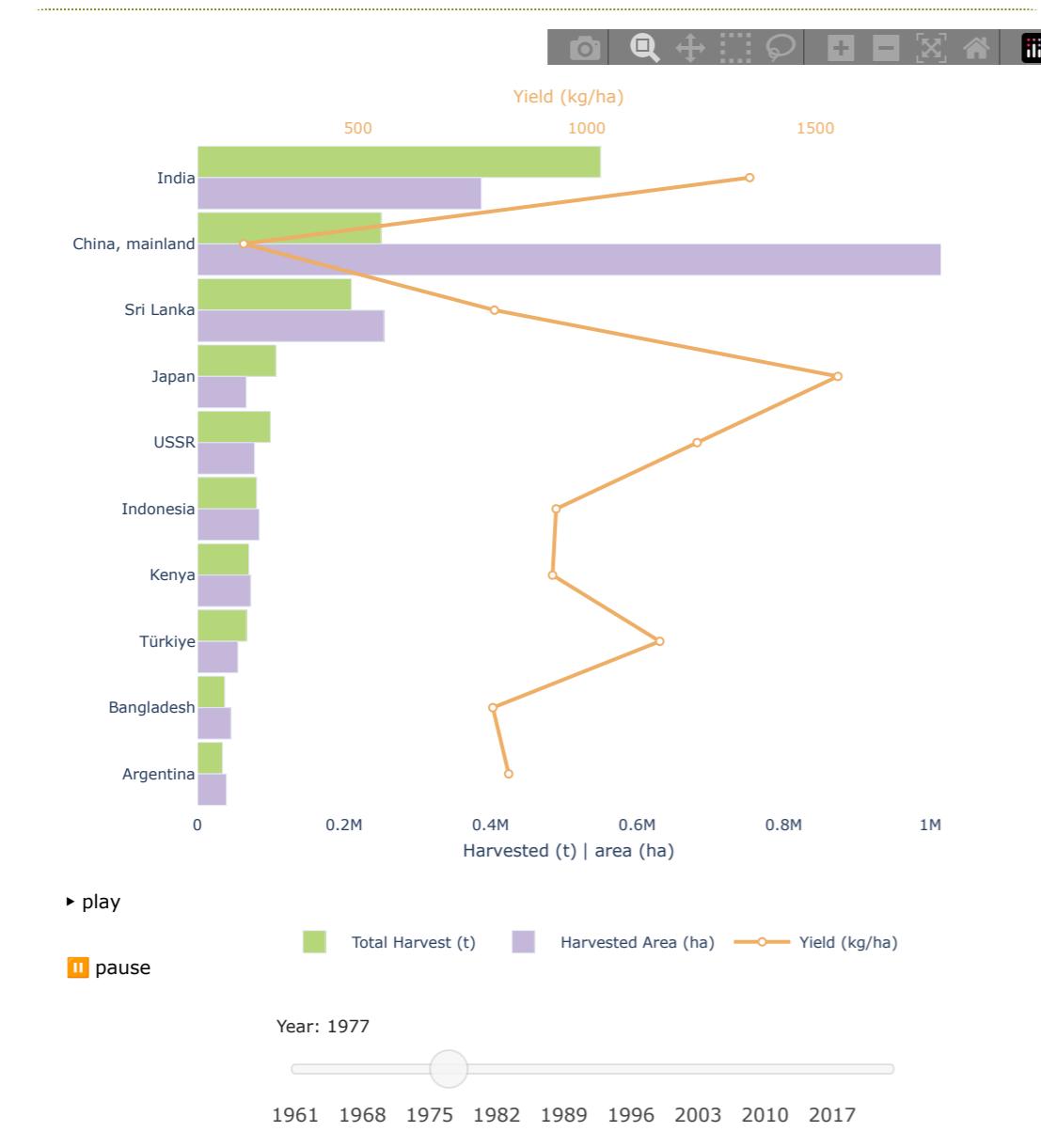


Global Tea production share  
5 countries : China, India, Kenya, Sri Lanka & Turkey  
> 99% world raw tea production

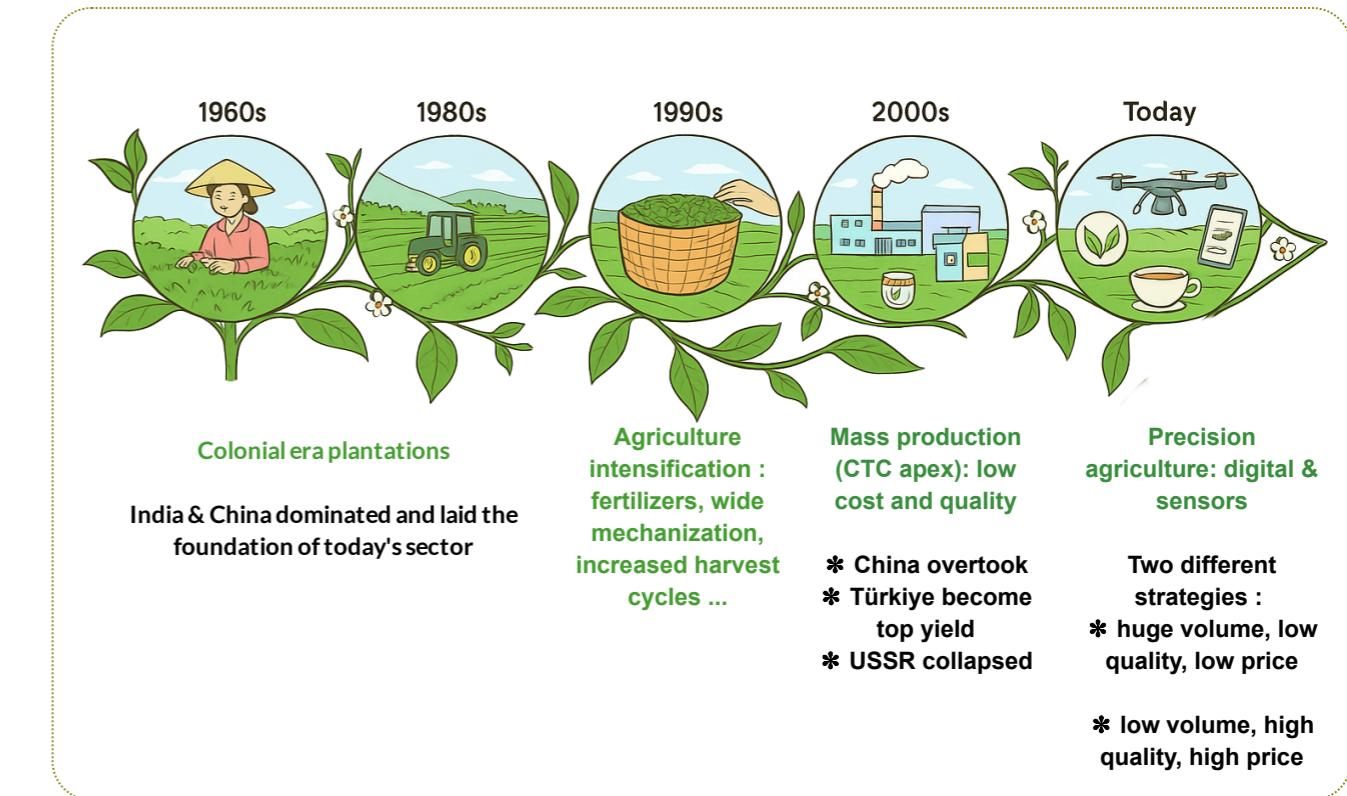


# Production History

*From colonial farms  
to tea estates & precision agriculture*



1991 !! statistical methods changed in FAO data



## 1961–1980 top producers

1. India
2. China
3. Sri Lanka
4. Indonesia
5. USSR
6. Japan

(highest yields - early mechanization)

## Top producers since 2002

1. China
2. India
3. Sri Lanka
4. Kenya
5. Indonesia / Vietnam

(depending on year)

## Trade dynamics 2022-2023

Total exportation (\$) 206,7 Md  
Total exportation (t) 81,2 M  
Export % of total ... 35,1 %

Exportation keep increasing -  
Price volatility double after 2011

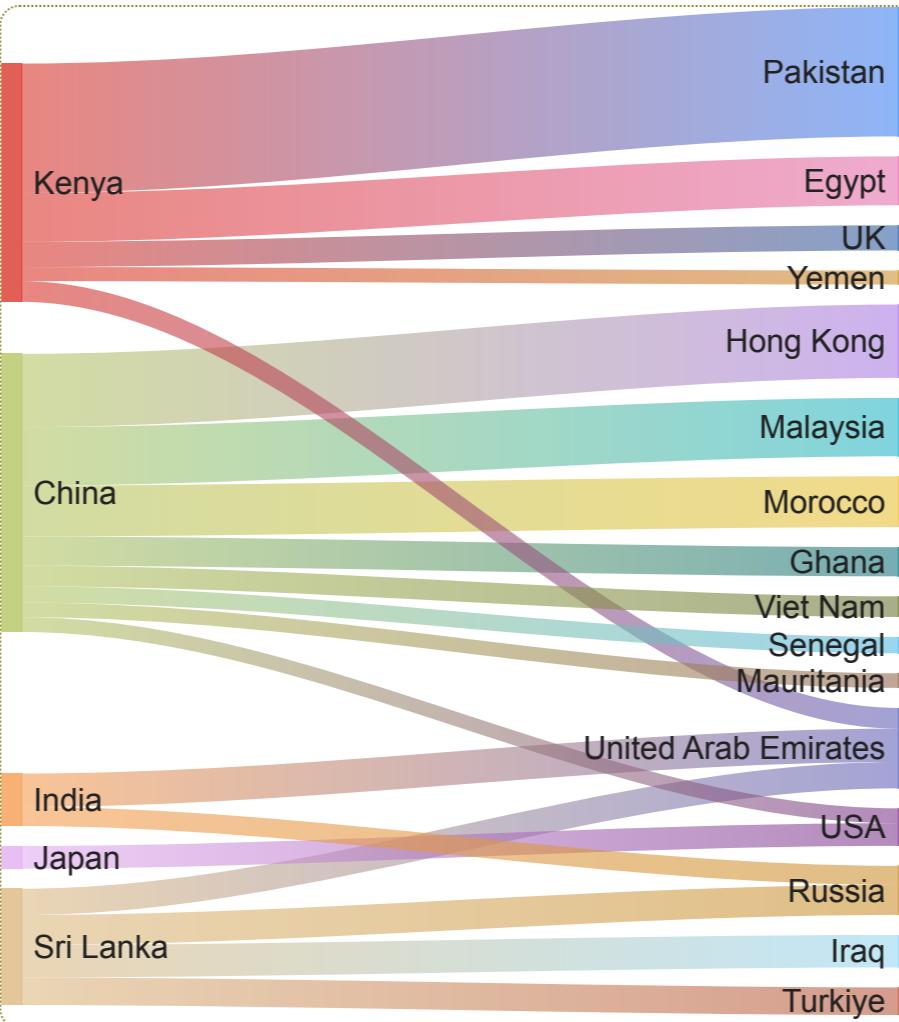


5 countries  
dominate exports

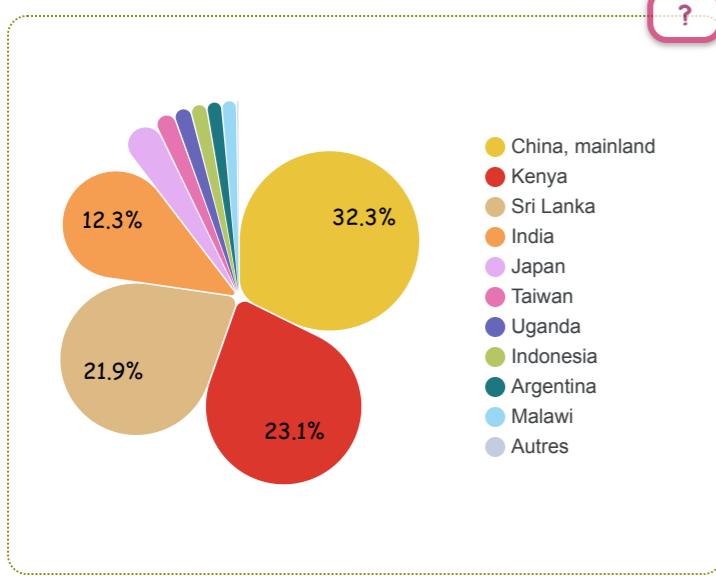
Trade expands,  
risk deepen: since  
2011, volatility  
doubled, exposing  
producers to  
greater market  
reliance &  
uncertainty

Country from ▾  
Country to ▾  
Continent to ▾  
Clear

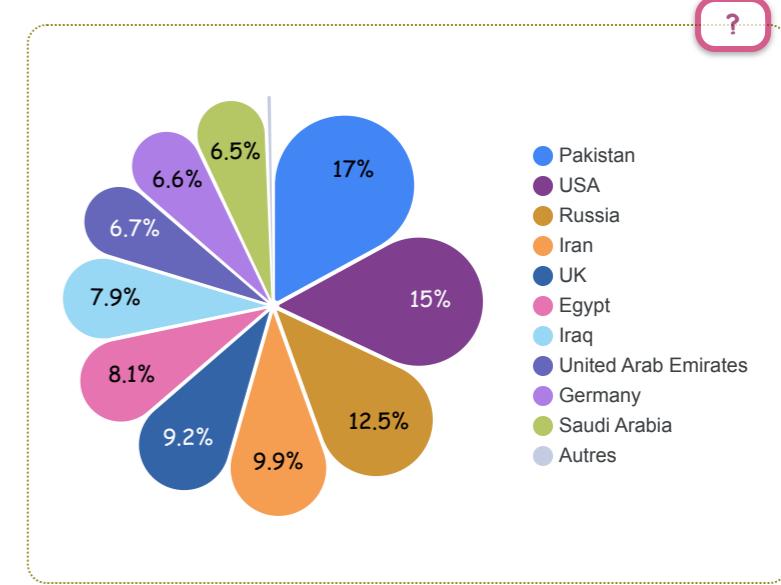
### Main trade routes (\$) - 1st route : Kenya → Pakistan



5 countries :  
China, Kenya, Sri Lanka, India & Japan  
> 90% global exportation (\$)



Global tea importations (\$) are shared  
between 10 countries



Export reliance  
(% of total production)

28,5 %

Fairtrade  
certified area

18,8%

Farmer price  
volatility  $\sigma$  (\$/t)

305,0

Export reliance =  
income instability.

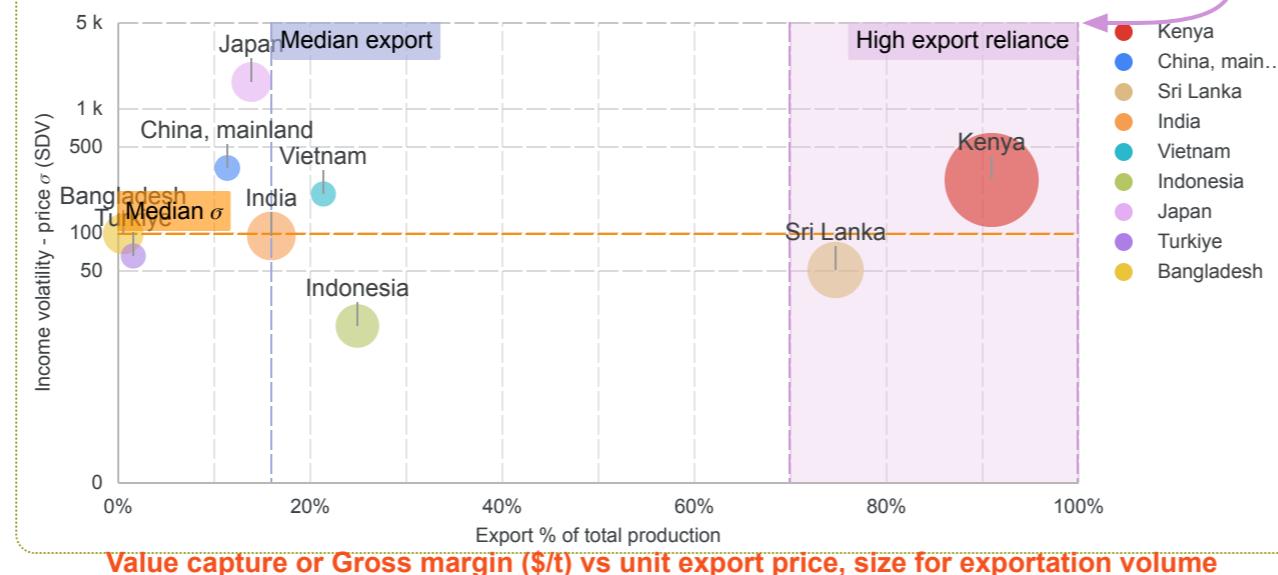
Certification and  
local demand  
cushion price  
shocks

Top producers  
exporters

Country

Clear

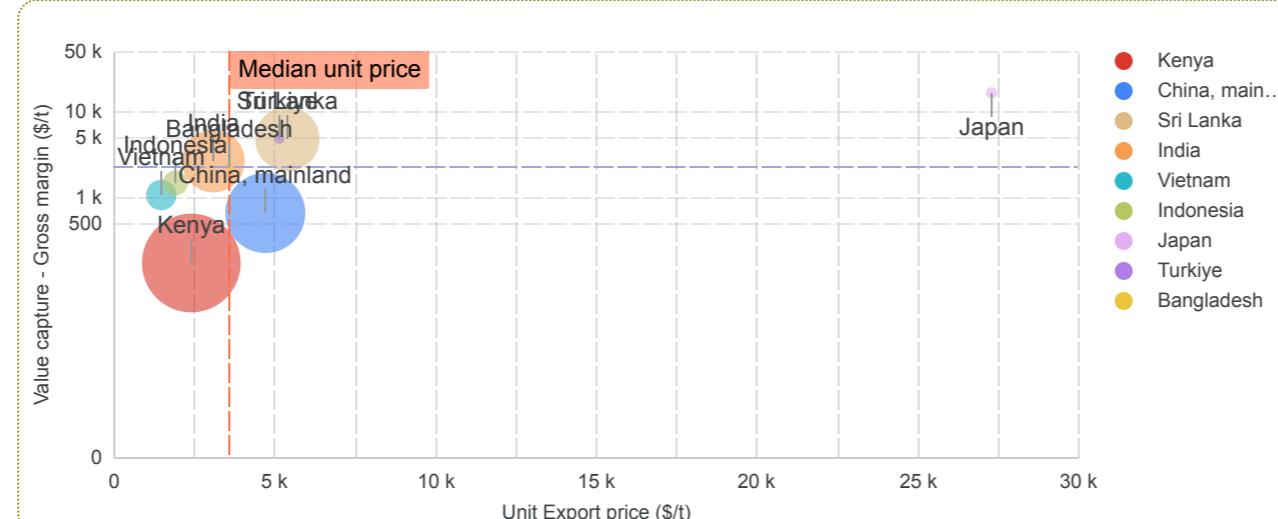
High export reliance = lower price stability (% of fairtrade certification bubble size)



High export reliance (>70%) : farmer are exposed to market shocks but higher certification level offer some protection against income volatility :

**Kenya** exports large volumes but retain less than 30% value → profit leaks downstream

**Sri Lanka**, achieves premium pricing and better gross margin through branding



**India**, mix quality and quantity production, moderate export reliance, buffer price with moderate certification %

**China** and **Japan**, premium tea quality are exposed to  $\sigma$  price but buffered by high domestic demand (low export %)

Next: How export price volatility translates into farm-level income gaps → Farmer Vulnerability

High yield ≠  
high income

Mechanization  
raises  
volume, not  
earnings

Top producers  
exporters

Country  
Clear

Average farmer  
price (\$/t)

3,4 k

Median farmer  
price (\$/t)

1,1 k

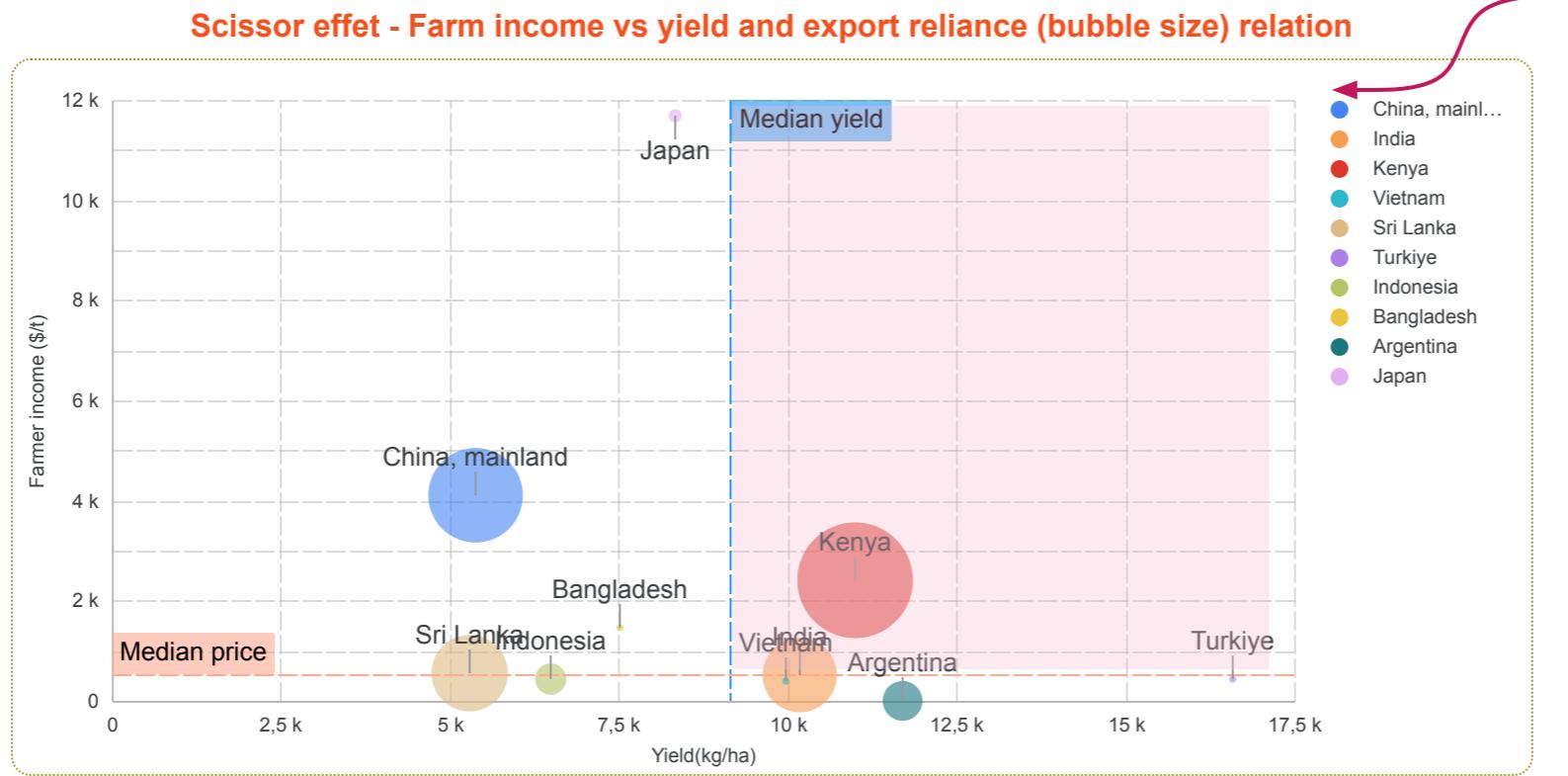
Export reliance  
(% of total production)

28,5 %

Farmer price  
volatility  $\sigma$  (\$/t)

305,02

**Scissor effet and high farmer  
vulnerability :**  
**High yield, high volume (low quality)**  
≠ high income



### Kenya

Median price, solid yield, big production  
and export reliant

### India & Vietnam

Maintain moderate export reliance but  
face low prices due to mid-quality  
positioning. Certification marginally  
improves price stability

### Japan

high labor price & moderate yield buffer  
by high mechanization & quality niche  
tea

### China

leveraging scale with domestic  
consumption and moderate price

### Sri Lanka & Indonesia

Medium position

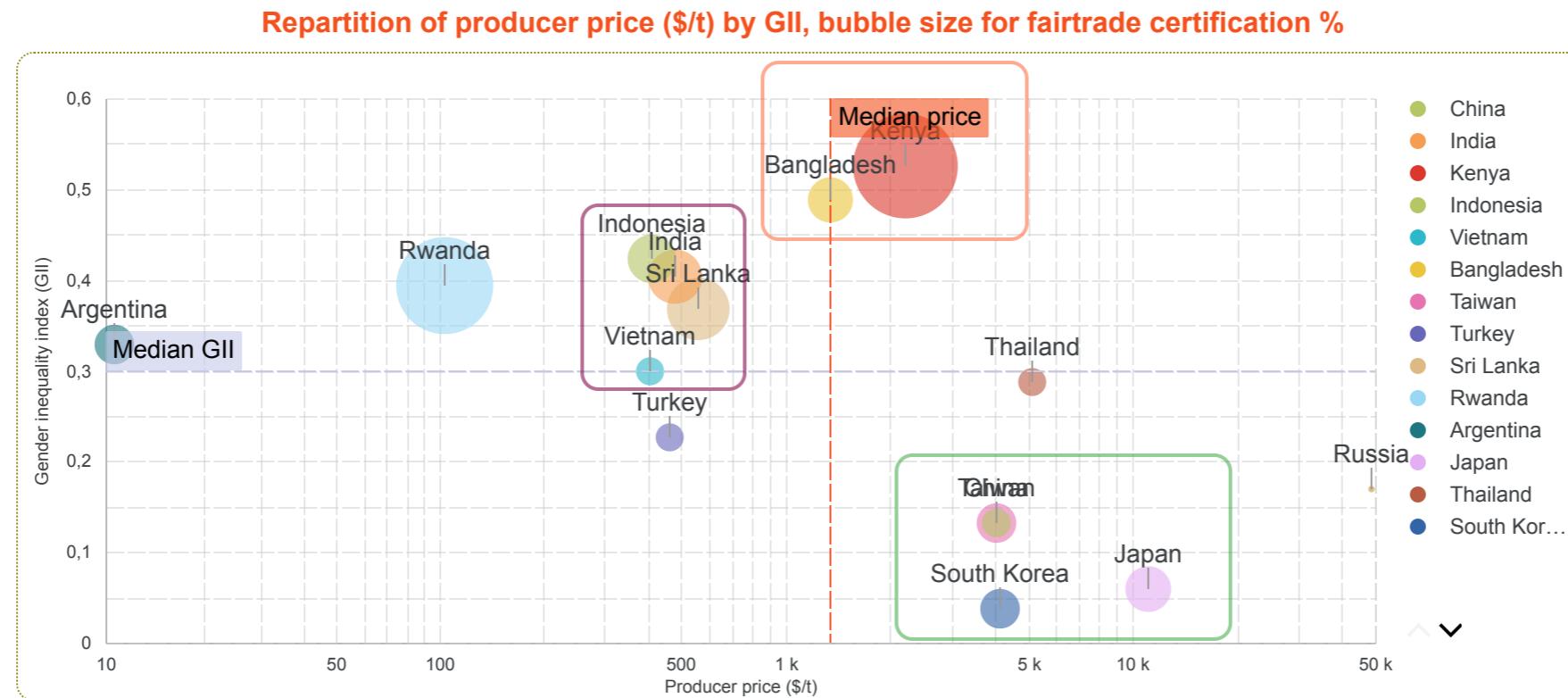
**Equitable trade (fairtrade) and certification remain essentials**

**Certification improves farm income stability for both high & moderate yield**

Women labor share	Gender gap indicator GII*	Fairtrade area (%)	Smallholder share
80%	0,30	15,0	61,1%



Three main clusters :



Around 80% of tea workers and nearly all pickers are women, yet gender inequality remains significant (median GII = 0.30)  
Countries with better gender equality (Japan, Sri Lanka, Taiwan) capture higher prices due to higher skill intensity and better labor conditions

**Social risk = economic risk: gender gaps and poor labour conditions lower value retention**

**Empowerment drives equity**

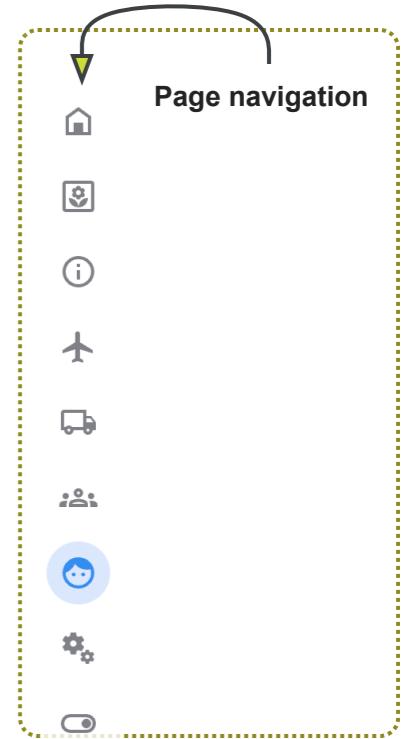
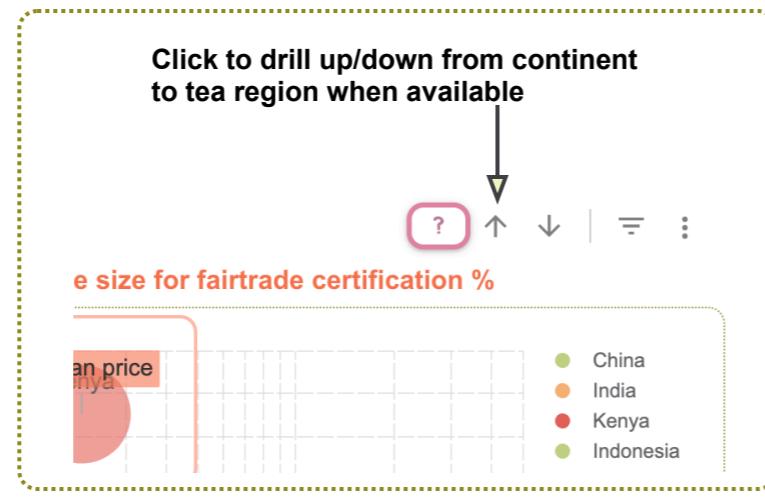
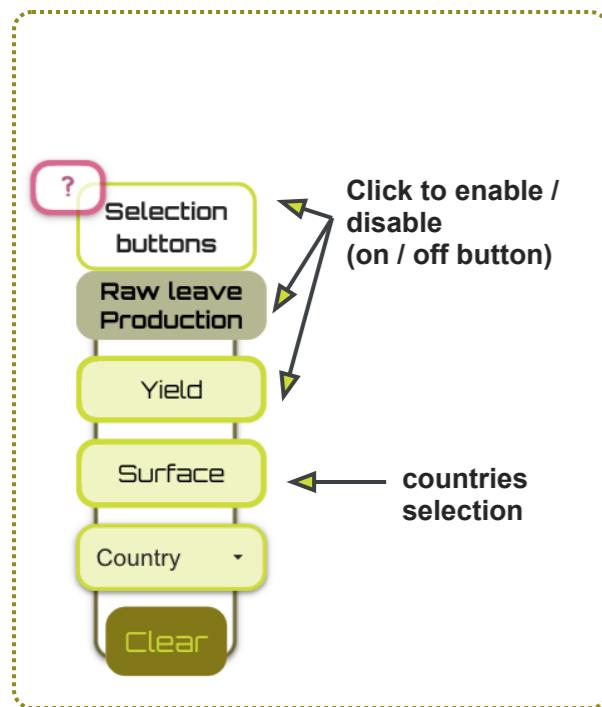
## Building a Resilient Tea economy

Resilience level	Main countries	Key characteristics
Low	Kenya, Bangladesh, Vietnam	High export dependence (>70%), low value capture (<30%), high price volatility, weak labor equity (GII > 0.35), moderate to high fairtrade to support equity and living conditions
Moderate	India, Indonesia, Türkiye, Sri Lanka	Mixed strategy (volume + quality), moderate export reliance (40–70%), partial fairtrade coverage improving gender equity and living conditions
High	Japan, China, Taiwan	Strong domestic demand (<40% exports), high mechanization, premium tea markets, high gender equity (GII < 0.25), stable farmer income

### Resilience equation

*Sustainability = diversified markets + fairtrade certification + gender equity*

## How to use this looker dashboard ?



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