



Conselho Nacional do Café

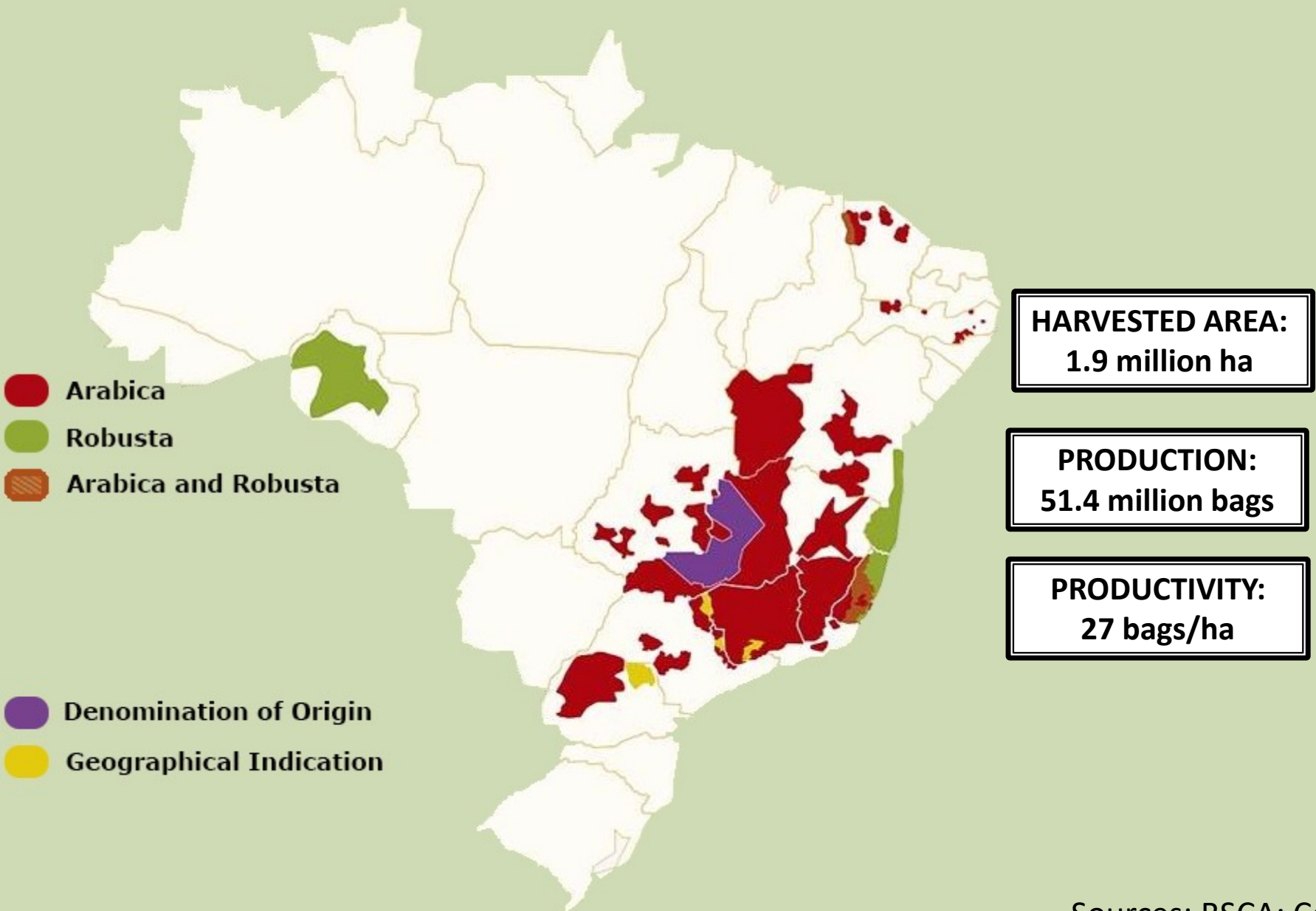
# **BRAZILIAN COFFEE PRODUCTION: OVERCOMING THE CHALLENGES OF SUSTAINABILITY**

7th Consultative Forum on Coffee Sector Finance

27 September 2017

**Silas Brasileiro**  
**Executive President**

# Brazilian Coffee Season 2016/17



Sources: BSCA; Conab.



# Quality: Positive Evolution

- Brazil's range of climate and landscapes lends itself to the production of unique specialty coffees.

*Brazil's growth in specialty coffees:*

**15% year over year since 1999;**

**2% growth rate - normal coffee market**



Source: BSCA.

# Substantial Productivity Increase



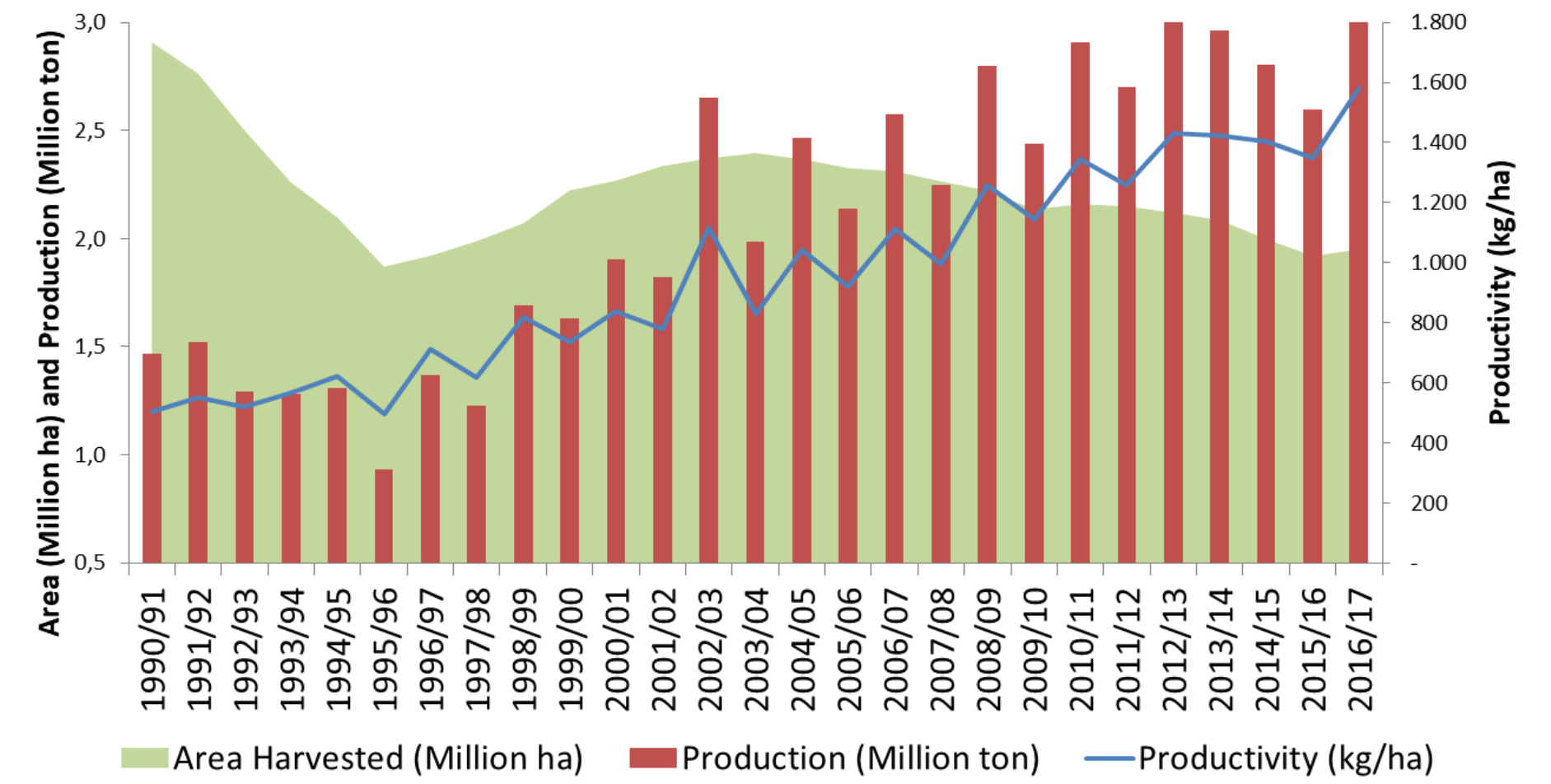
**SEASON 1996/97:**  
Production: 25 M. bags  
Area: 2.9 M. ha  
Productivity: 500 kg/ha

**SEASON 2016/17:**  
Production: 51,4 M. bags  
Area: 1.9 M. ha  
Productivity: 1.550 kg/ha

+ 100%

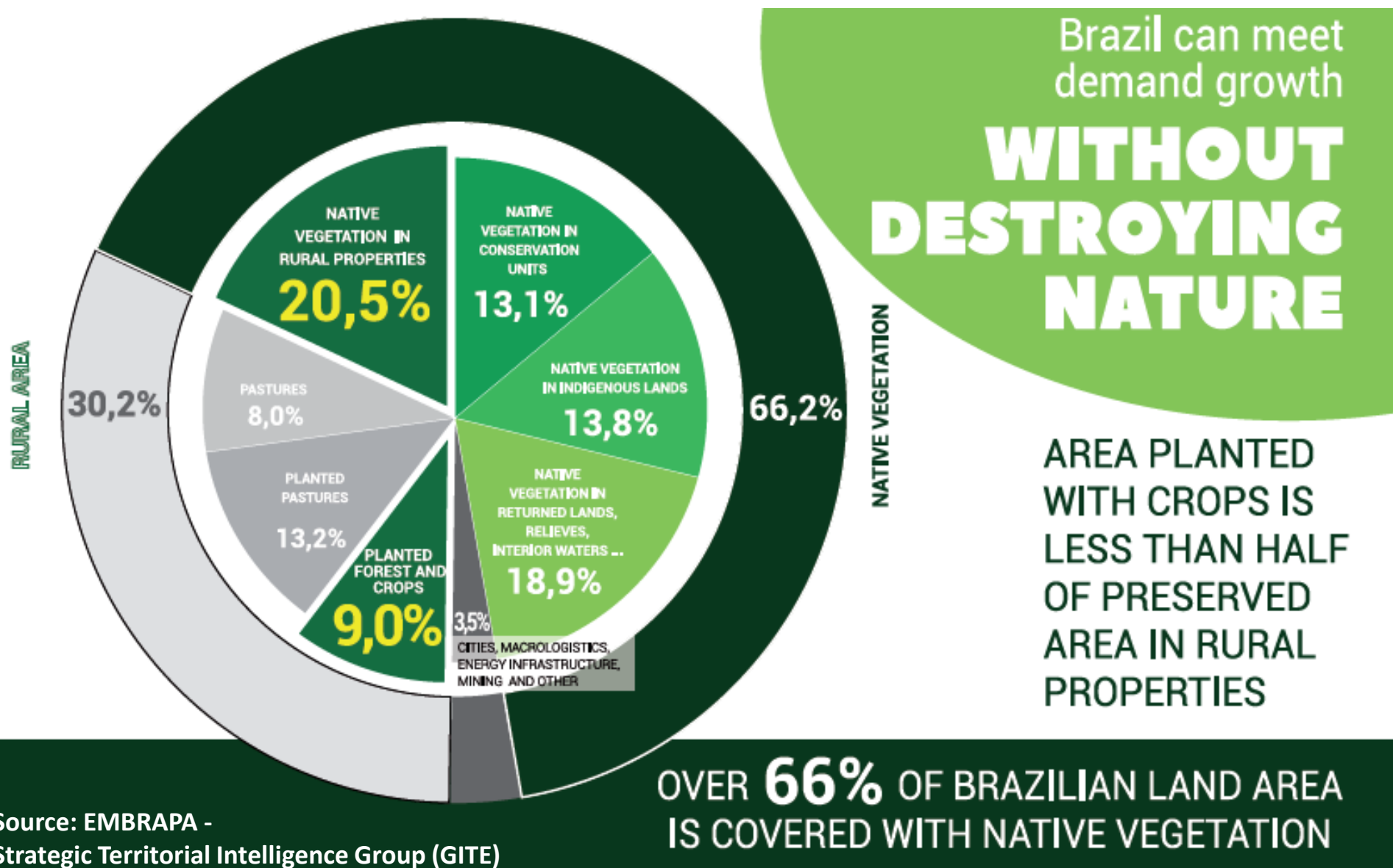
- 35%

+ 225%



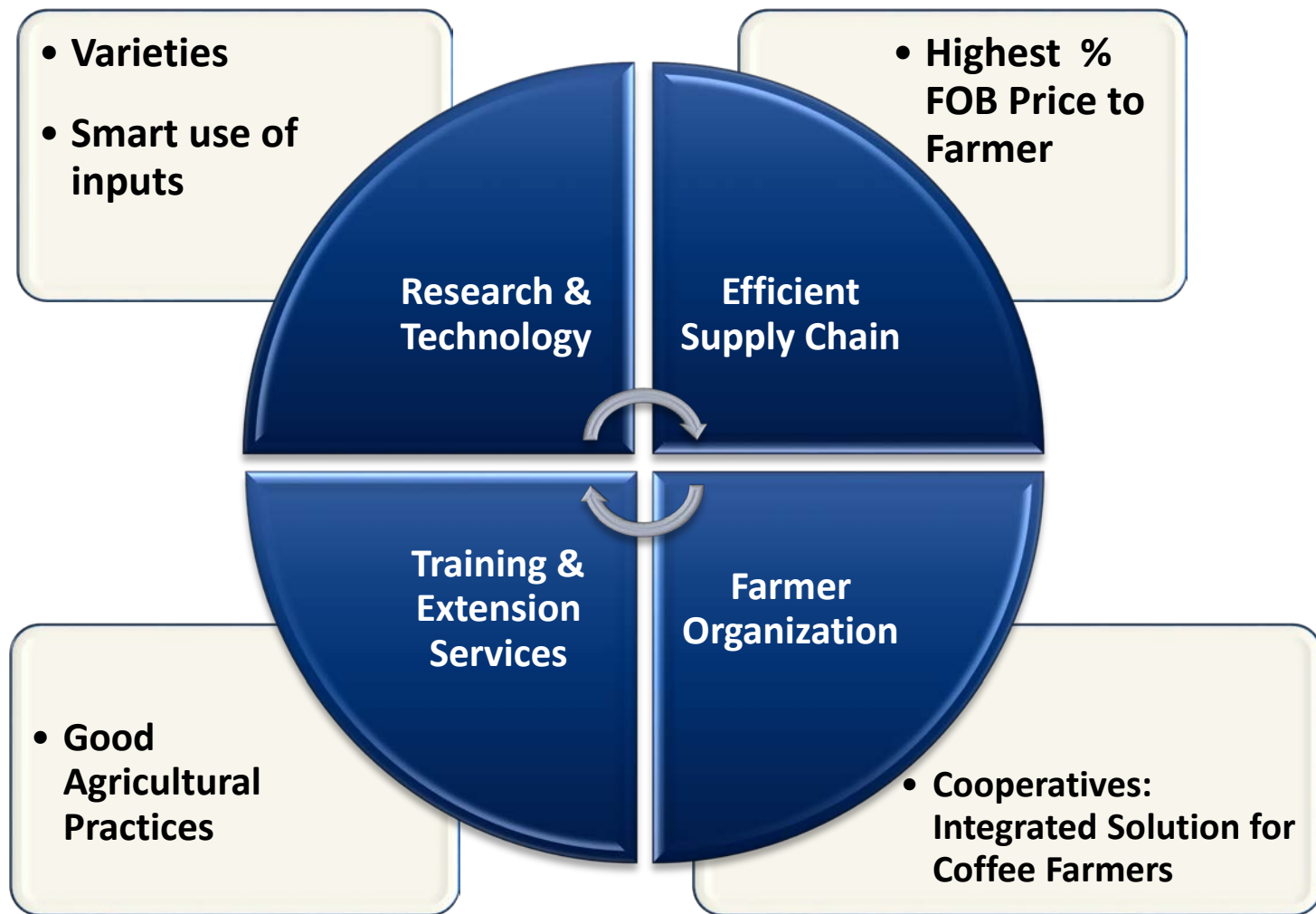
Sources: FAO; Conab.

# Consequence: Environmental Sustainability





# Main Reasons Behind Productivity Increase





# 1. Research & Technology: Brazilian Research Consortium

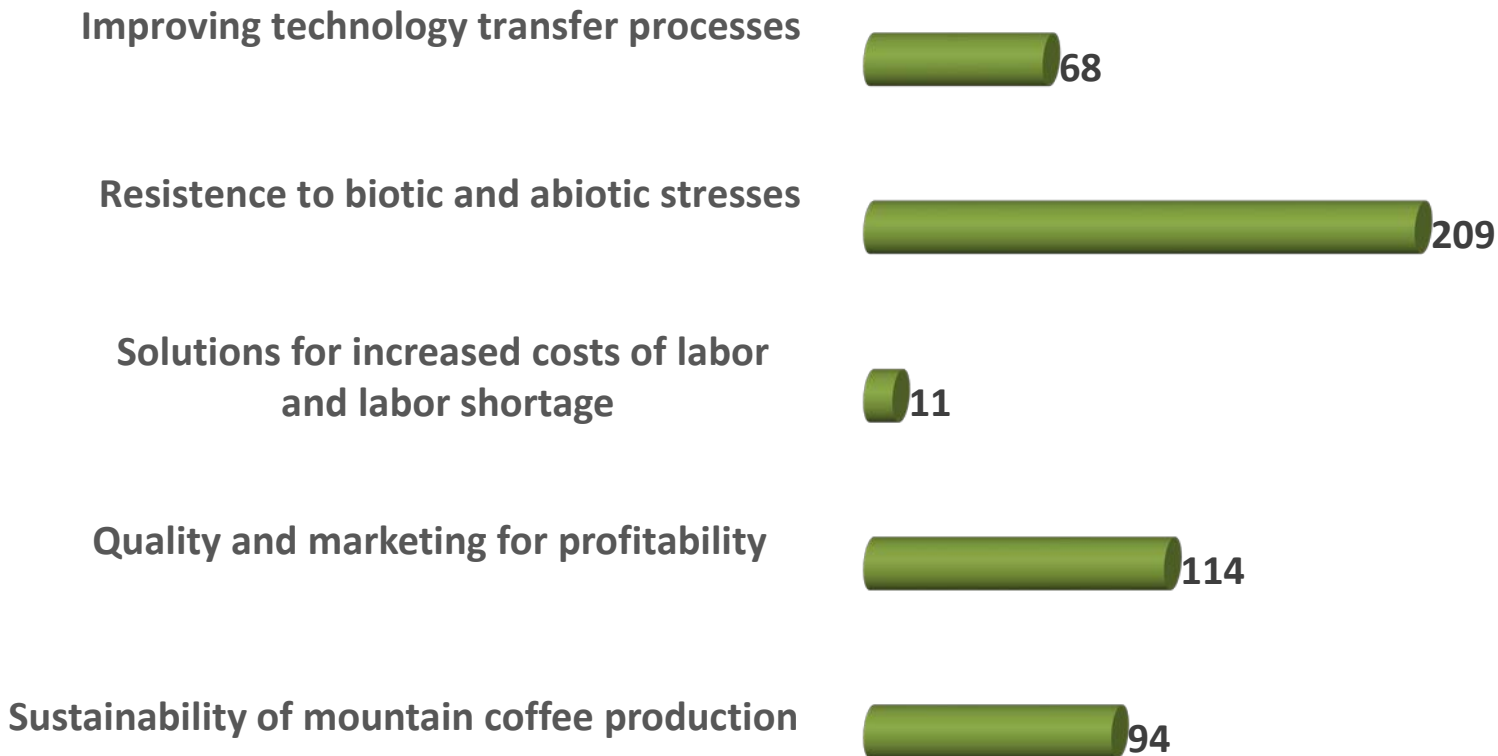
- Coordinated by Embrapa Café;
- More than 50 education, research and technology transfer institutions;
- 12 Brazilian States;
- 92 Research Projects; 496 Plans of Action in progress;
- More than 1,000 researchers and technicians involved.



# Applied Research on Coffee Supply Chain Problems



## Plans of Action by Subject





# Research & Technology: Some Examples



## Coffee Breeding

**COFFEE GENOME**: More than 33,000 expression genes identified: Applied biotechnology in progress to improve:



**Coffee Quality**



**Resilience to  
Climate Change**

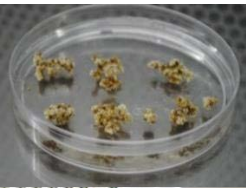


**Resistance to Pests  
and Diseases**

**NEW HYBRID COFFEE VARIETIES**: New technologies in less time - clones with desirable agronomic features:

- ✓ High productivity;
- ✓ High quality;
- ✓ High vigor;

- ✓ Resistance to leaf rust;
- ✓ Shorter orthotropic internode length.



# Coffee Quality



**CONTROLLED DROUGHT STRESS**: higher sucrose and lipids concentrations in cherries— positive precursors of quality.



# Environment Sustainability

**BRACHIARIA BETWEEN COFFEE** : improved water and nutrients absorption; improved soil quality; enhanced carbon sequestrating capacity.



# Economic Sustainability

**CYCLIC PRUNING PROGRAM** : increased average productivity and reduced labor costs.



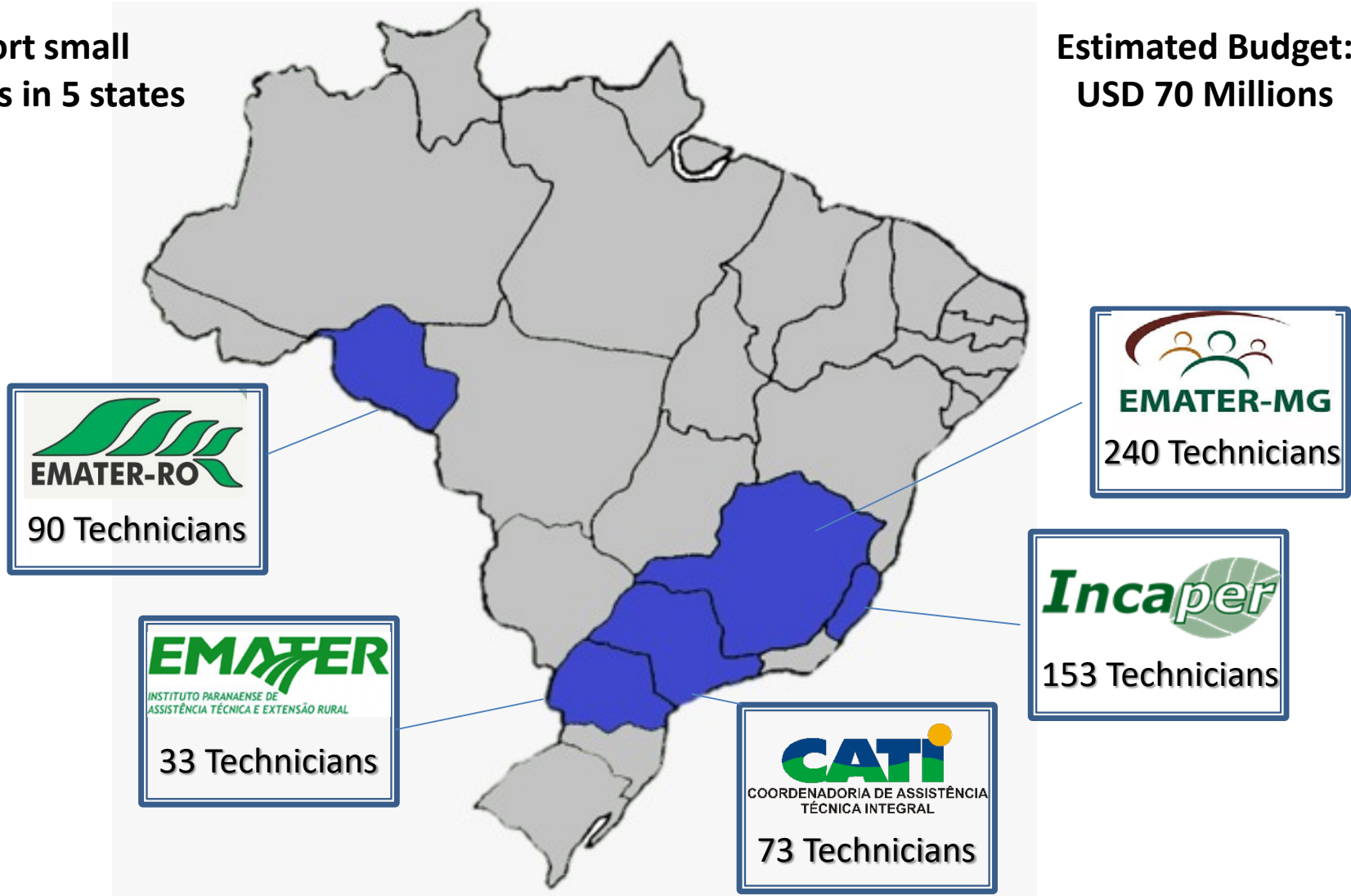
# 2. State Governments Training & Extension Services



*Number of Technicians Working With Coffee Producers*

Support small producers in 5 states

Estimated Budget:  
USD 70 Millions





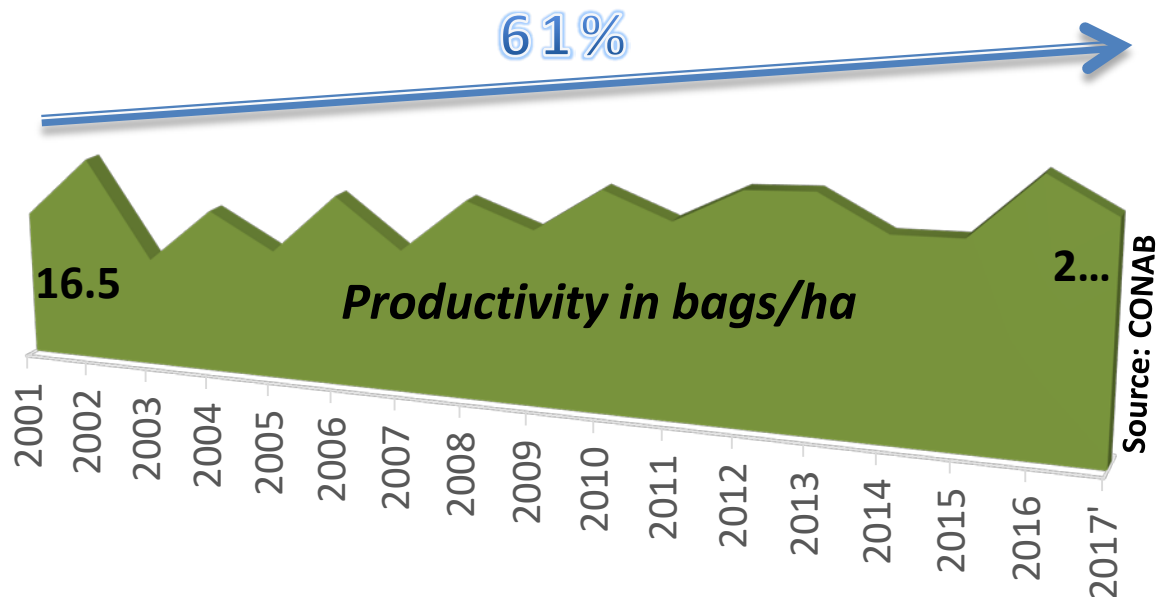
# Training & Extension Services: Some Highlights



## Sustainability

- Initiative of the Minas Gerais Government (SEAPA – IMA – EMATER) - focus on good production practices and socio-environmental responsibility in coffee production;
- 1.230 coffee farms certified in 2016;
- Lower cost to farmers and international recognition – UTZ is as partner.

## Incentive to Quality: Annual Contest in Minas Gerais







# Training & Extension Services: Some Highlights

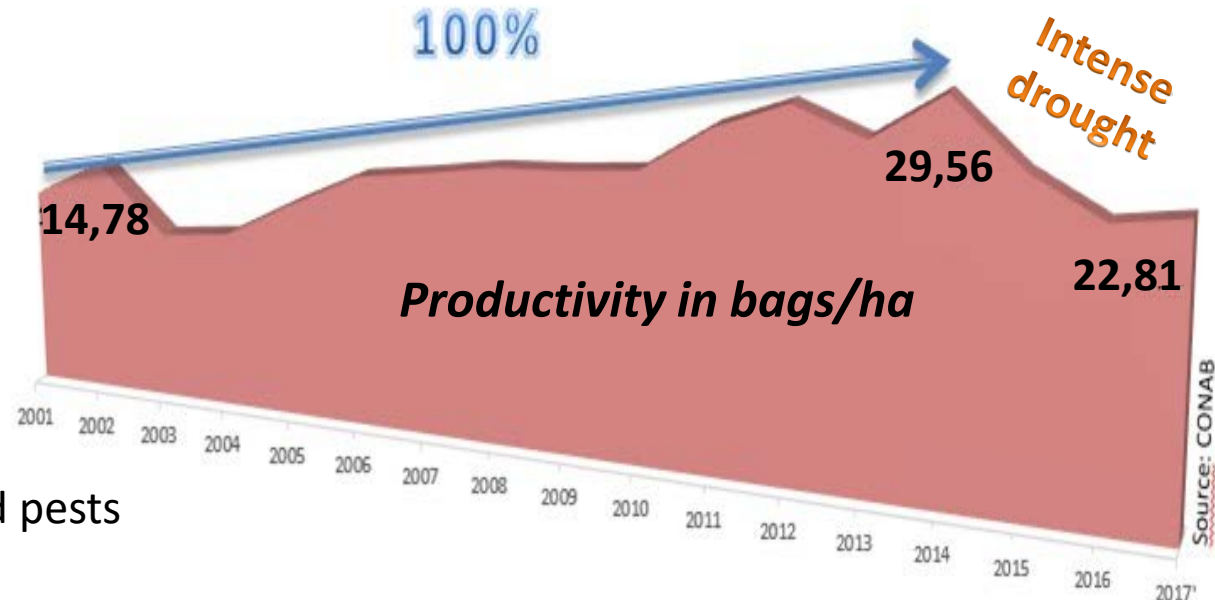


## ESPÍRITO SANTO

- In the last 2 decades Espírito Santo State went through a revolution: expressive growth of Arabica production and became the main Brazilian producer of conilon (robusta).
- Prominent role of Incaper: developing, transferring and assisting farms (specially small ones) to adopt new technologies.

- Climate Change: knowledge and technology to increase drought resilience

\*mulching, irrigation, fertilizer and pests management; pruning; etc.

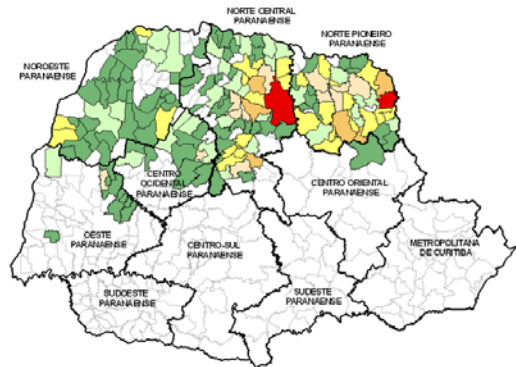




# Training & Extension Services: Some Highlights

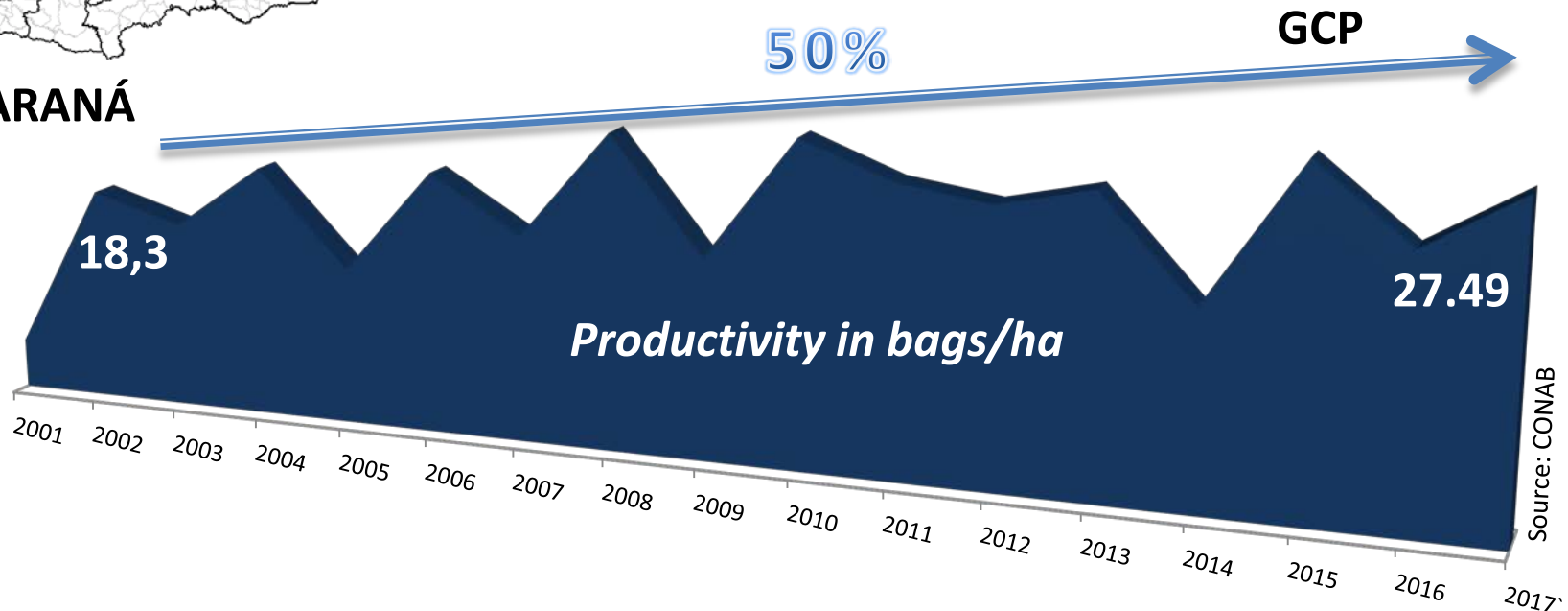
**EMATER**

INSTITUTO PARANAENSE DE  
ASSISTÊNCIA TÉCNICA E EXTENSÃO RURAL



**PARANÁ**

- Paraná Coffee Project: 3,900 small coffee farmers assisted : productivity, quality, marketing and organization.
- Quality: 90% of the cupping centers are managed by EMATER



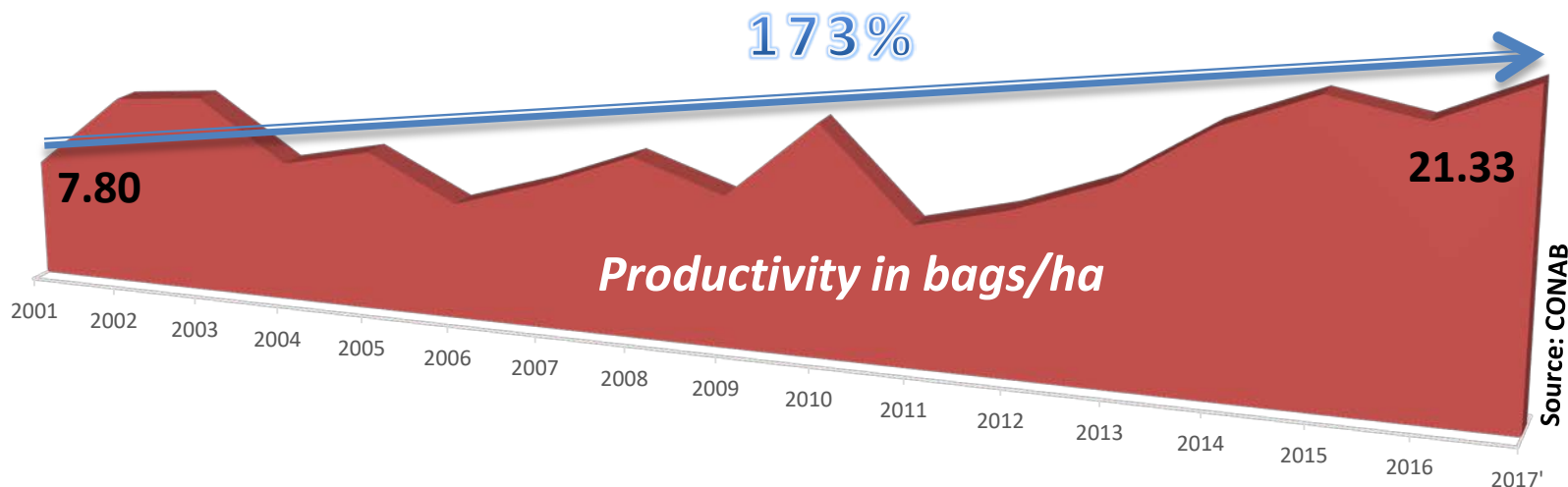
# Training & Extension Services: Some Highlights



## RONDÔNIA



- Revitalization of Coffee Areas in Rondônia: Emater transfers and assists farms to adopt new technologies (certified clonal seedlings and good practices).
- Technician visits each grower 10 times per year.
- New conilon clonal varieties developed by Embrapa have high performance – potencial 100 bags/ha.



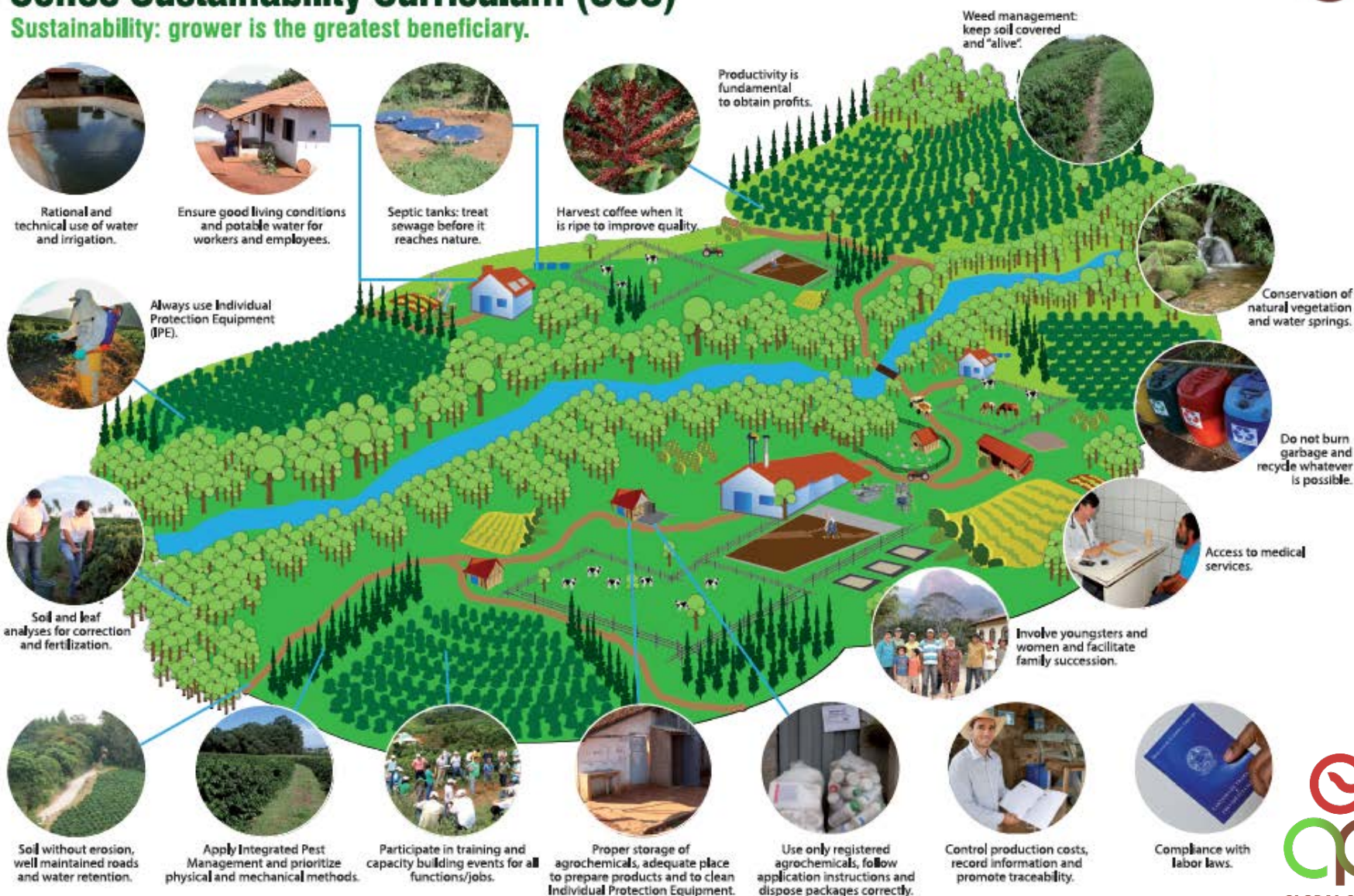


# Training & Extension Services: Some Highlights



## Coffee Sustainability Curriculum (CSC)

**Sustainability: grower is the greatest beneficiary.**



Photos: Fernando Martinez, Pedro Basso, Oscar J. Pardo, www.profesionalismo.com



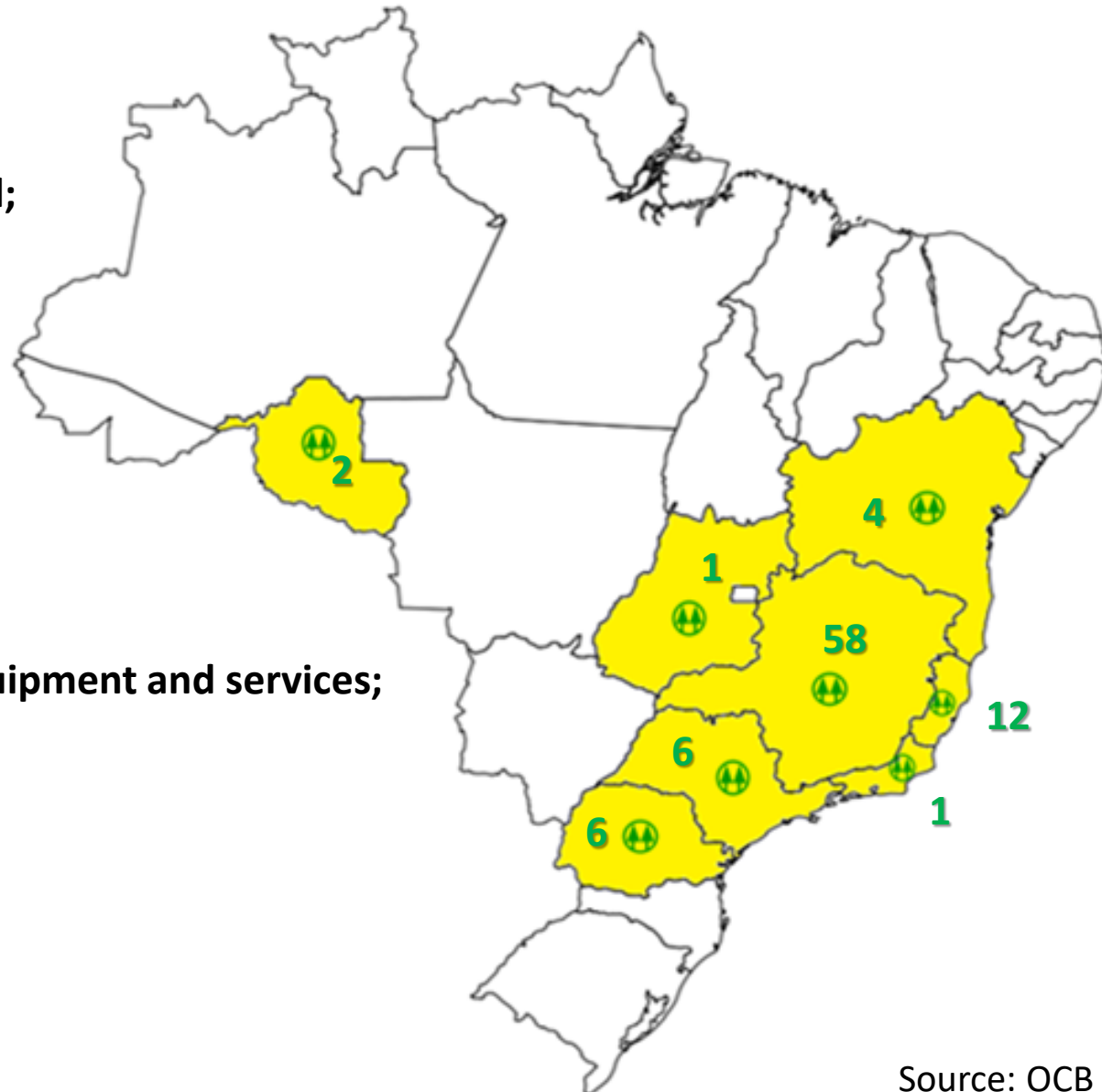
**GLOBAL COFFEE  
PLATFORM**  
for a sustainable coffee world





### 3. Farmers Organization – Coffee Cooperatives

- 90 Coffee Cooperatives in Brazil;
- Small farmers have the same market and technology access than the bigger ones.
- Integrated Solution: inputs, equipment and services;
- Gross Income: + US\$ 3 billion.



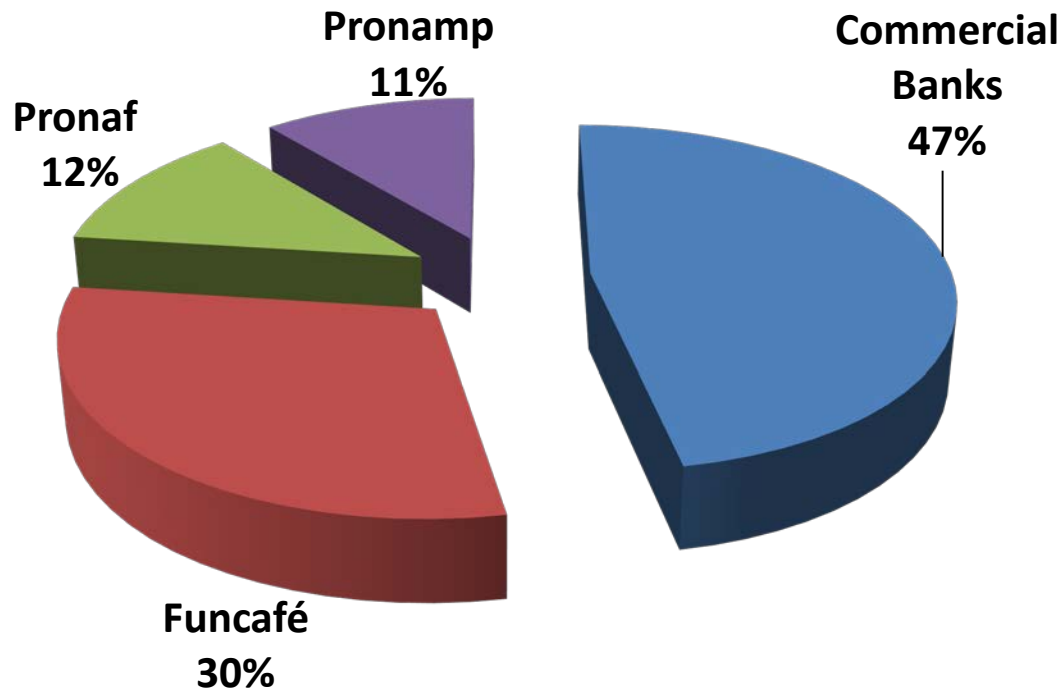


# Coffee Cooperatives: Assisting Farmers Day By Day



**Credit Access:** Cooperative Banks facilitate access to financing for farmers.

## ➤ Main Credit Sources for Coffee Production (2013-16 : + US\$ 11 billion)



## ➤ Other Credit Lines Available (BNDES):

- Inovagro: technological innovations and management improvement;
- Moderagro: Quality and Sustainability (e.g.: technology for coffee drying).
- Moderinfra: sustainable irrigation.



# Coffee Cooperatives: Assisting Farmers Day By Day



**Access to Agricultural Inputs:** In Brazil, cooperatives are the main distribution channel for lime, fertilizers, agrochemicals and seeds.



**Fertilizers: 52%**

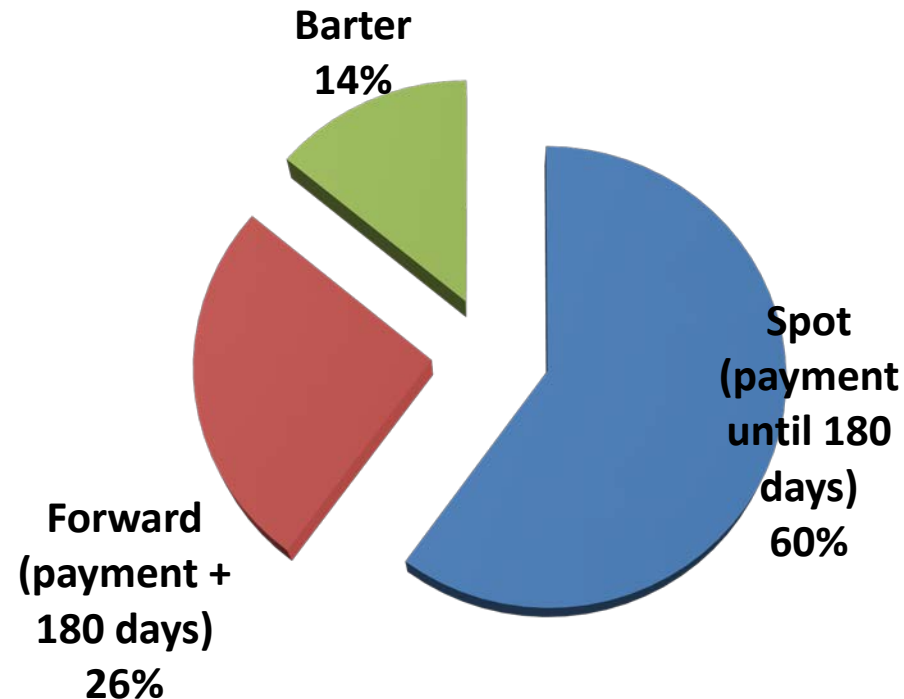


**Agrochemicals: 51%**



**Seeds: 47%**

## Types of Negotiation



Source: Fiesp/Icagro (2nd and 4th Quarters 2016)



# Coffee Cooperatives: Assisting Farmers Day By Day



**Technical Advice:** Team of agronomists and technicians: guidance for a more sustainable coffee production; access to technology.



**Economies of scale:** More advantageous conditions due to greater purchase and sales volumes.



**Post-harvest Processing:** Drying, Cleaning, Grading and Storage.

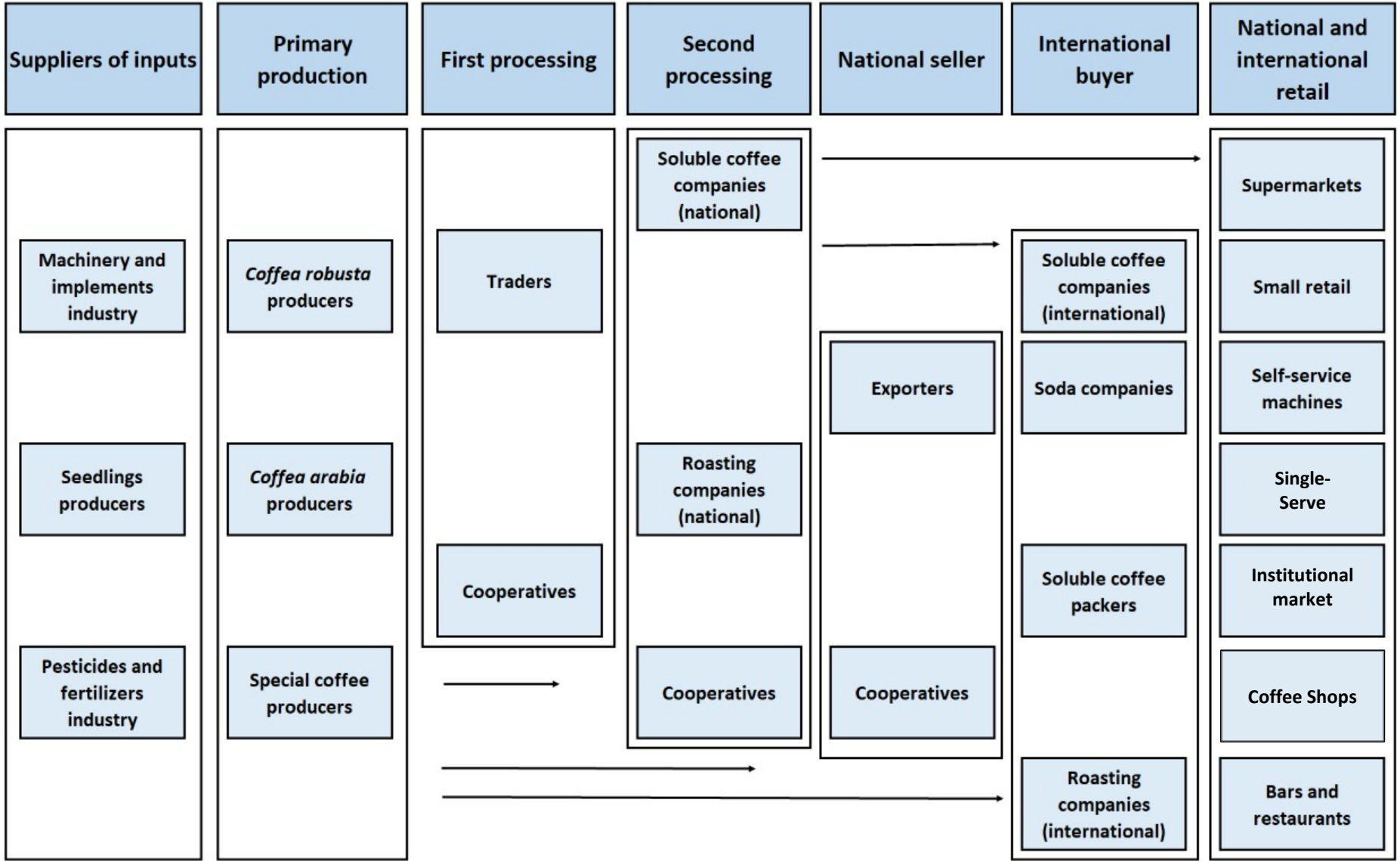


**Market:** Facilitate access to: (i) domestic and international markets and (ii) risk management instruments (hedge).



**Adding Value:** Investment in coffee industrialization and Incentive for the production of specialty coffees.

# 4. Efficient Coffee Supply Chain



## 4. Efficient Coffee Supply Chain



**Open Market + Efficient Organization from Research to Export Harbor**

*Farmers receive, on average, 85% of FOB Price*





# Final Remarks

- Although efficient management of the coffee sector and increase in productivity are essential to achieve economic sustainability, the price paid for the bag of coffee is of utmost importance for income security.
- It is essential that production growth be linked to increased consumption to avoid excess supply that may bring down global coffee prices.
- Prices have not increased in spite of three years of consecutive deficits in global coffee supply.
- ICO data shows that global coffee consumption decreased by 0,3% in 2016.

***Is it advisable to encourage expansion of  
production in this scenario?***







**Thank You!**

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