VCA4D
VALUE CHAIN ANALYSIS FOR DEVELOPMENT

agrinatura for European Commission

Framing Question 2:

IS THIS ECONOMIC GROWTH INCLUSIVE?

Objective

- How do the VC **organisation** and **governance** involve the various stakeholders?
- How are the **incomes** and **employment** generated distributed among social groups?

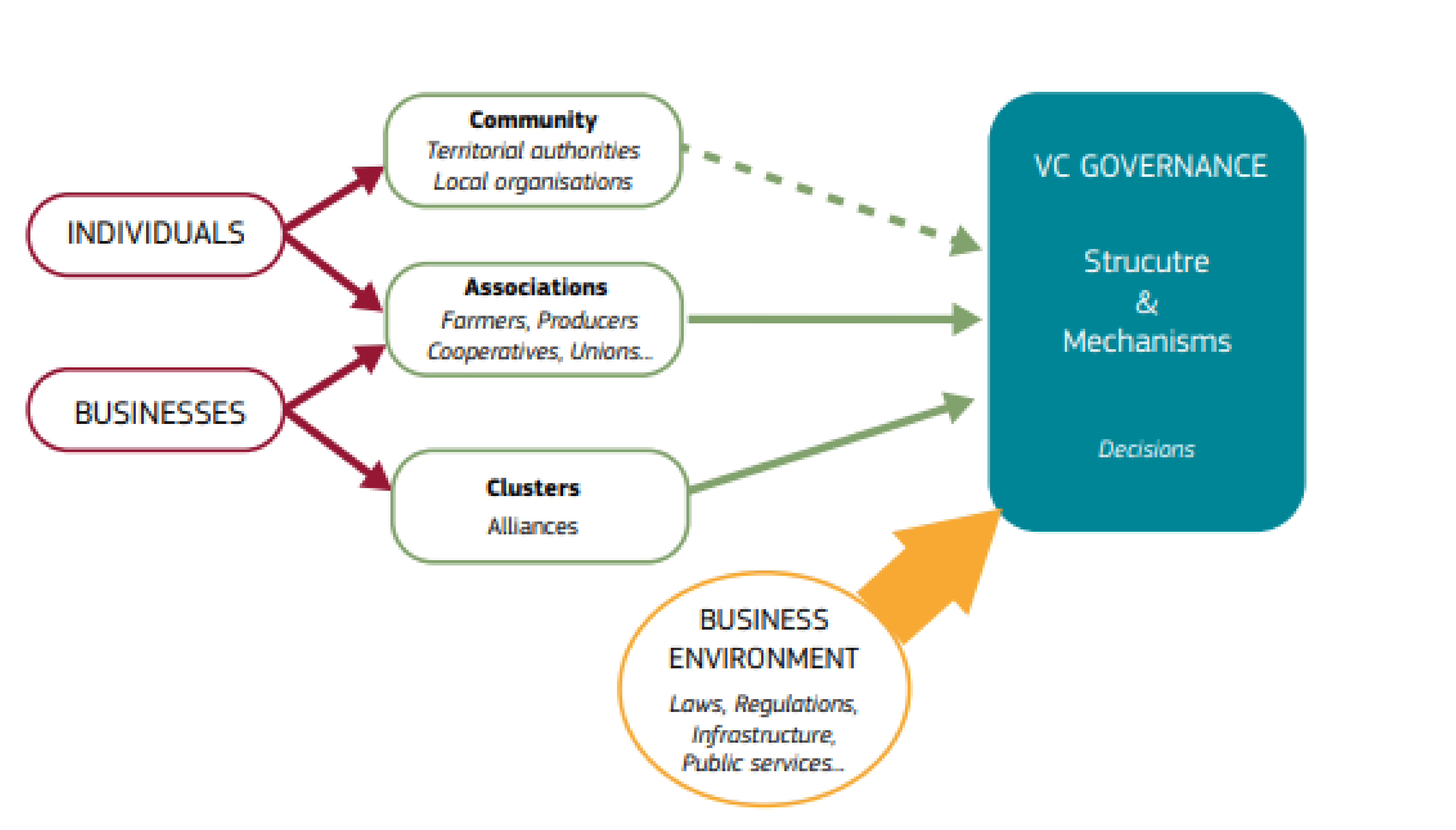
Economic and social experts build an image of inclusiveness of the VC.

➔Impact on vulnerable groups: subsistence-oriented farmers, smallholders, **women, youth,** and **marginalised people** (landless rural workers, minority communities…)

➔**Sub-chains** may have different outcomes on inclusiveness.

PARTICIPATION IN THE VALUE CHAIN GOVERNANCE

Who are involved in decision?



Experts are expected to

review the horizontal and vertical **coordination**, the rules and arrangements in place and the access to information

investigate on the **social capital,** i.e associations (farmers and producers' organisations, business alliances, workers' unions…), the power relations (including local authorities), the community involvement, and the level of trust

What are the (positive and negative) drivers?

Power of **producers' organisations** → How is the price set?

Market networks and **firms' integration** → How the negotiations on working conditions and price barganing are regulated?

Income distribution → Are women and vulnerable people involved in decision-making processes?

Access to assets and resources → What is the capacity of getting decent return?

Involvement in sub-chains (Fresh beans for export VC)

Smallholders in open market Individuals scattered in remote areas	Smallholders with contract Members of formal and informal groups
Participation in collective governance	
• No coordination: sales to brokers and middlemen (without direct contact with export companies) • Sales negotiated on spot with brokers and middlemen .No organisation to build social capital	• Contract provides close ties with export companies (including certification and support for management) • Early agreement on prices, collection times and produce quality • Membership in various formal and informal groups
Access to Services	
• Few extension services and no targeted counselling • Limited training (from brokers) on agronomic and food safety practices	• Contractual extension services on production and management practices and training on new market compliance requirements • Support for credit facilities and funding for a collection and grading house
Indicators	
• Yield around 6 t/ha • Reduced farm gate price • Operating Profit –6400 UM/1000 sqm² • Loosing market shares overtime	• Yield around 10 t/ha • Operating Profit – 30,000 UM/1000 sqm² • Sustained market share

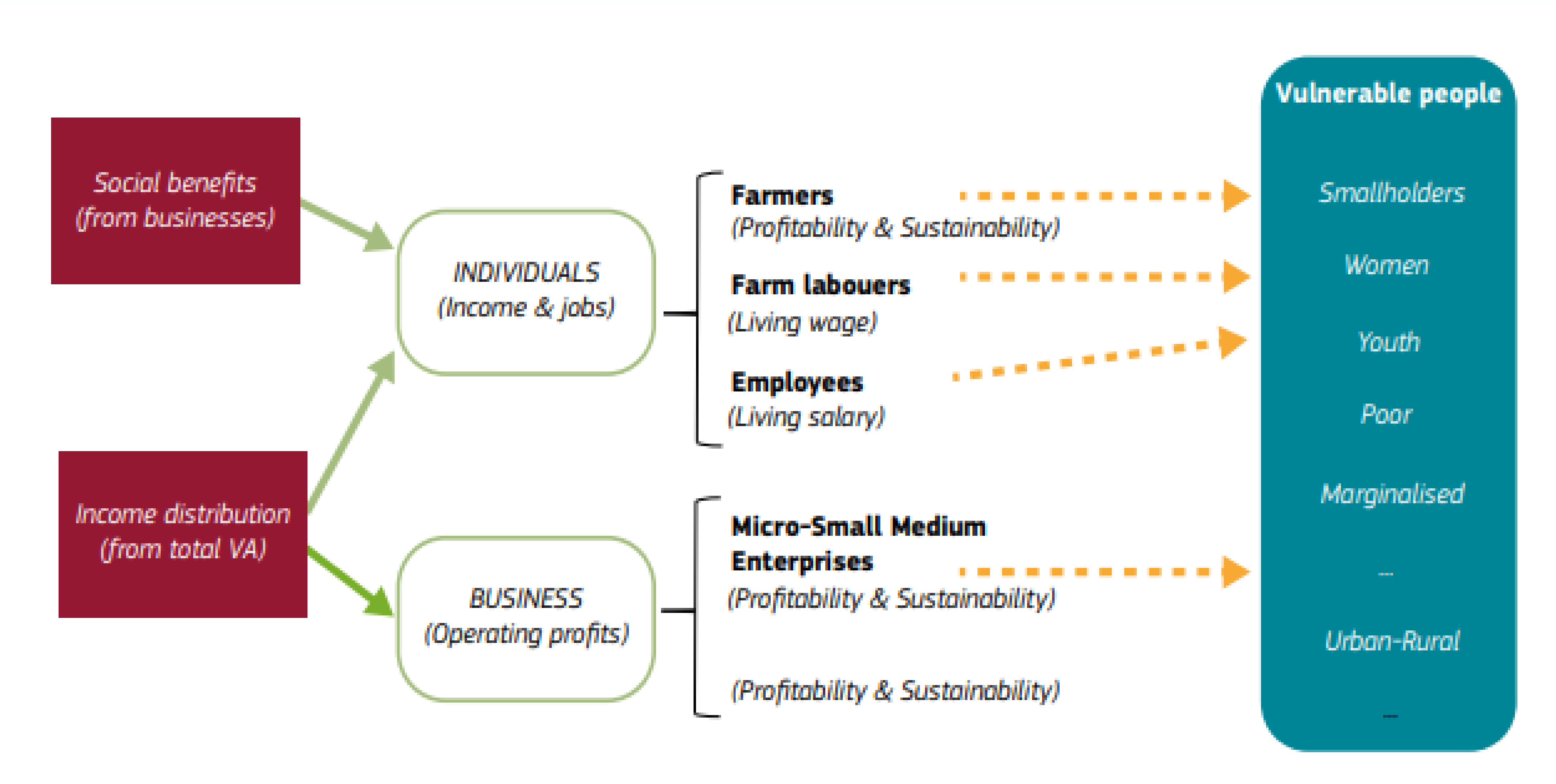
PARTICIPATION IN THE VC GOVERNANCE

INCOME AND EMPLOYMENT

INCOME AND EMPLOYMENT

How do households and businesses take advantage of the VC operations?

Main elements of the analysis of income and employment

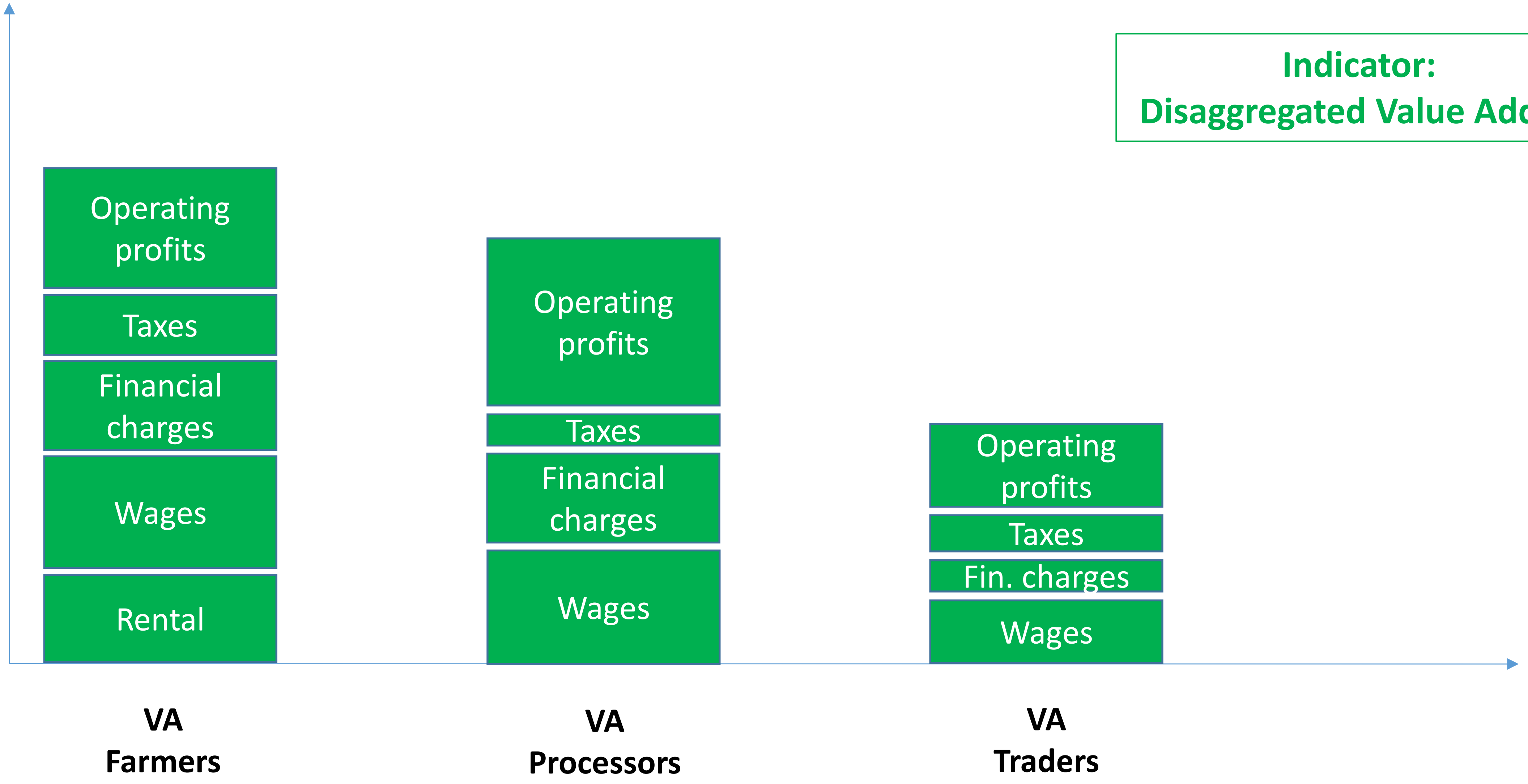


New !

Core Question 2.1: How is income distributed across actors of the VC?

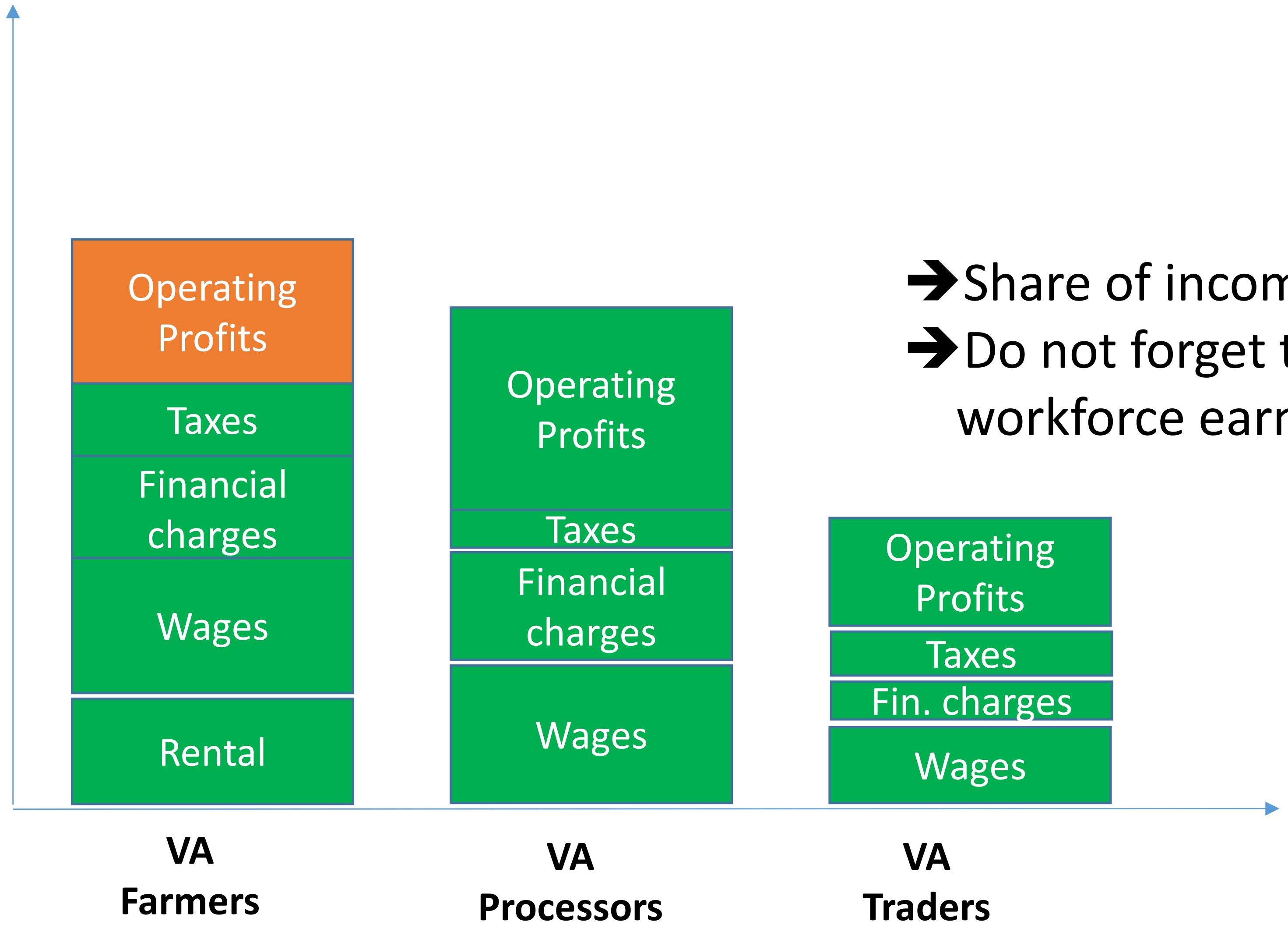
Indicators: **Disaggregated Value Added**; **Total Farm Income**; **Total wages and salaries** (at every stage, all activities – absolute and %); Value of social benefits; Comparison of sub-chain’s income distribution; **Total income accruing to marginalized and vulnerable groups.**

CQ 2.1 : How is income distributed across actors of the value chain?



Indicator: Disaggregated Value Added

CQ 2.1 : How is income distributed across actors of the value chain?



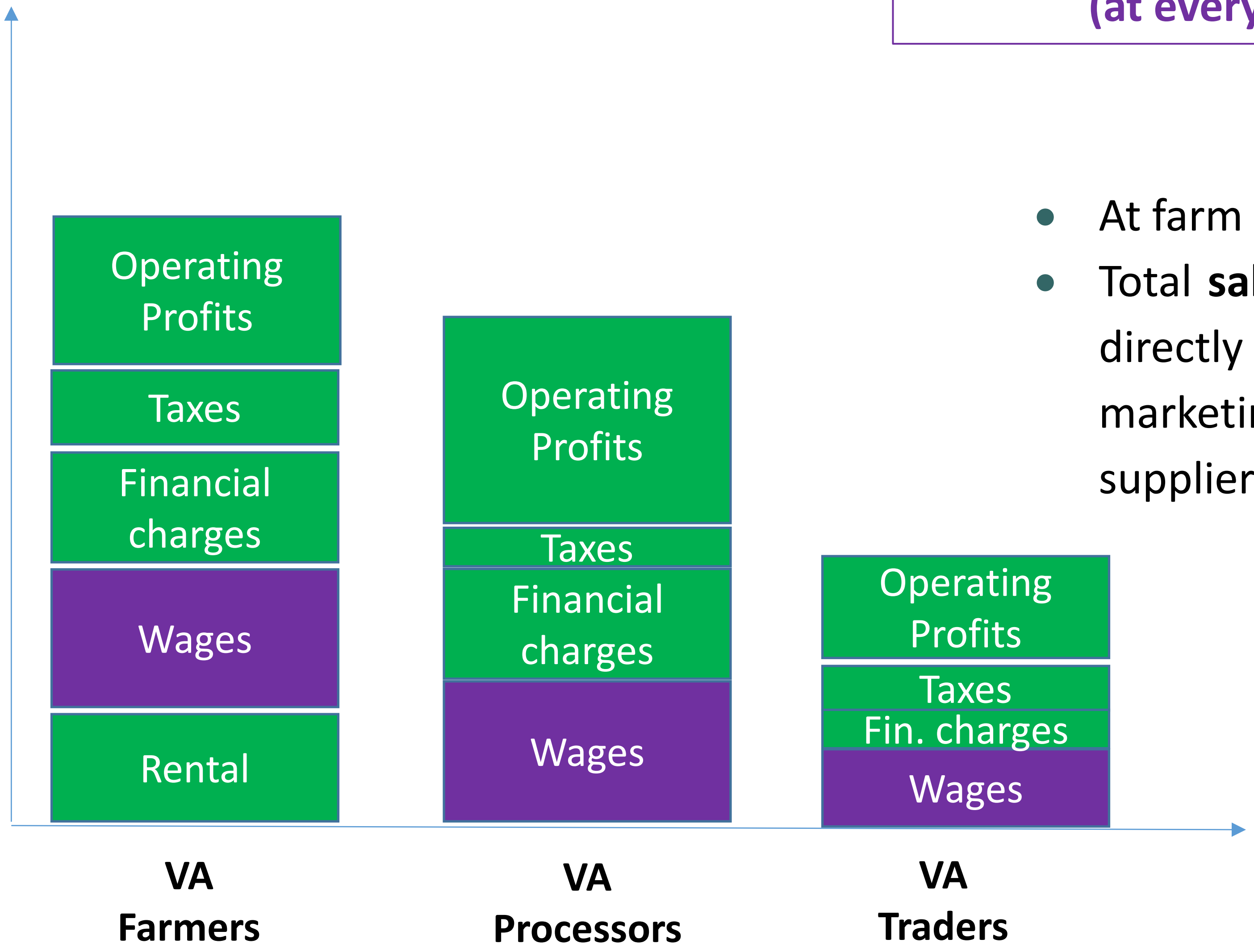
Indicator: Total farm income

➔ Share of income to smallholders ?

➔ Do not forget to add wages that the family workforce earn on other farms for VC operations

CQ 2.1 : How is income distributed across actors of the value chain?

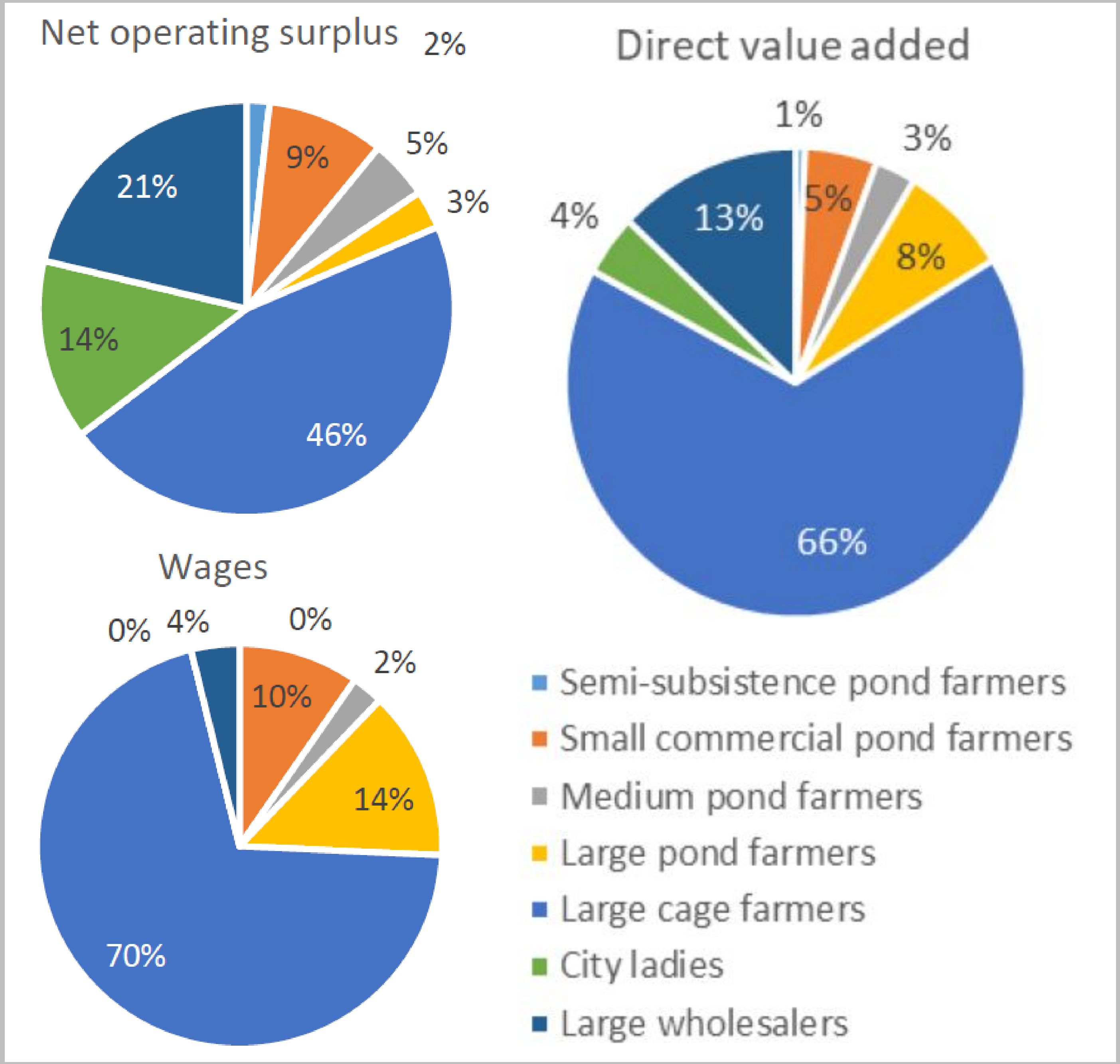
Indicator:
Total wages and salaries
(at every stages, all activities, absolute and %)



- At farm level: total **wages** of farm seasonal labourers
- Total **salaries** of individual businesses and companies directly involved in the VC **downstream** (processing, marketing, financial services…) and **upstream** (IC suppliers) activities

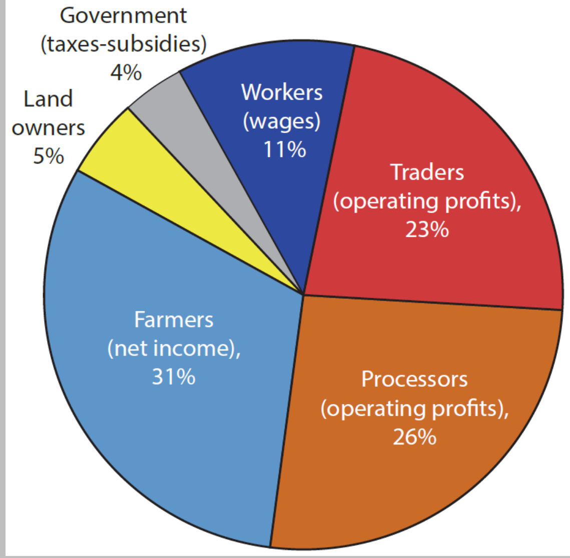
Aquaculture Zambia

Large farmers contribute consistently to jobs creation, they share 49% of the net operating surplus and 84% of the wages. In contrast, the contribution of traders to employment is limited. They share 35% of the net operating surplus and 4% of the wages.

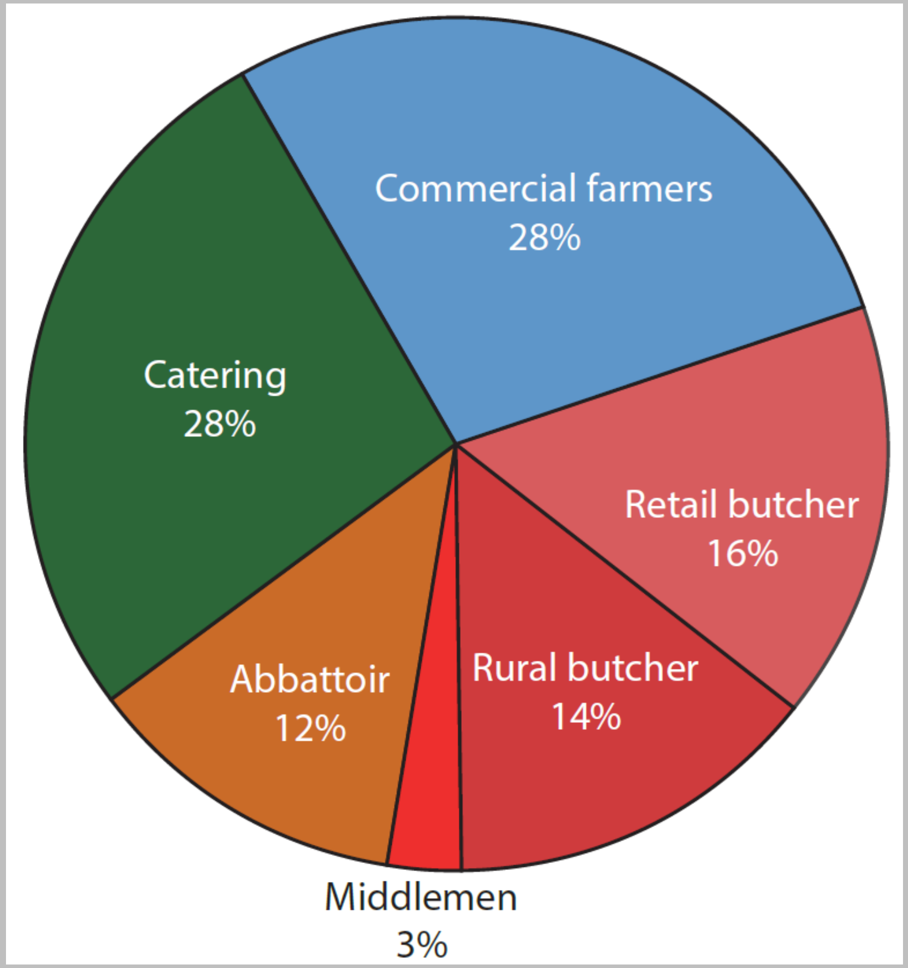


Beef Zimbabwe

Income distribution to VC actors



Wages (Workers)

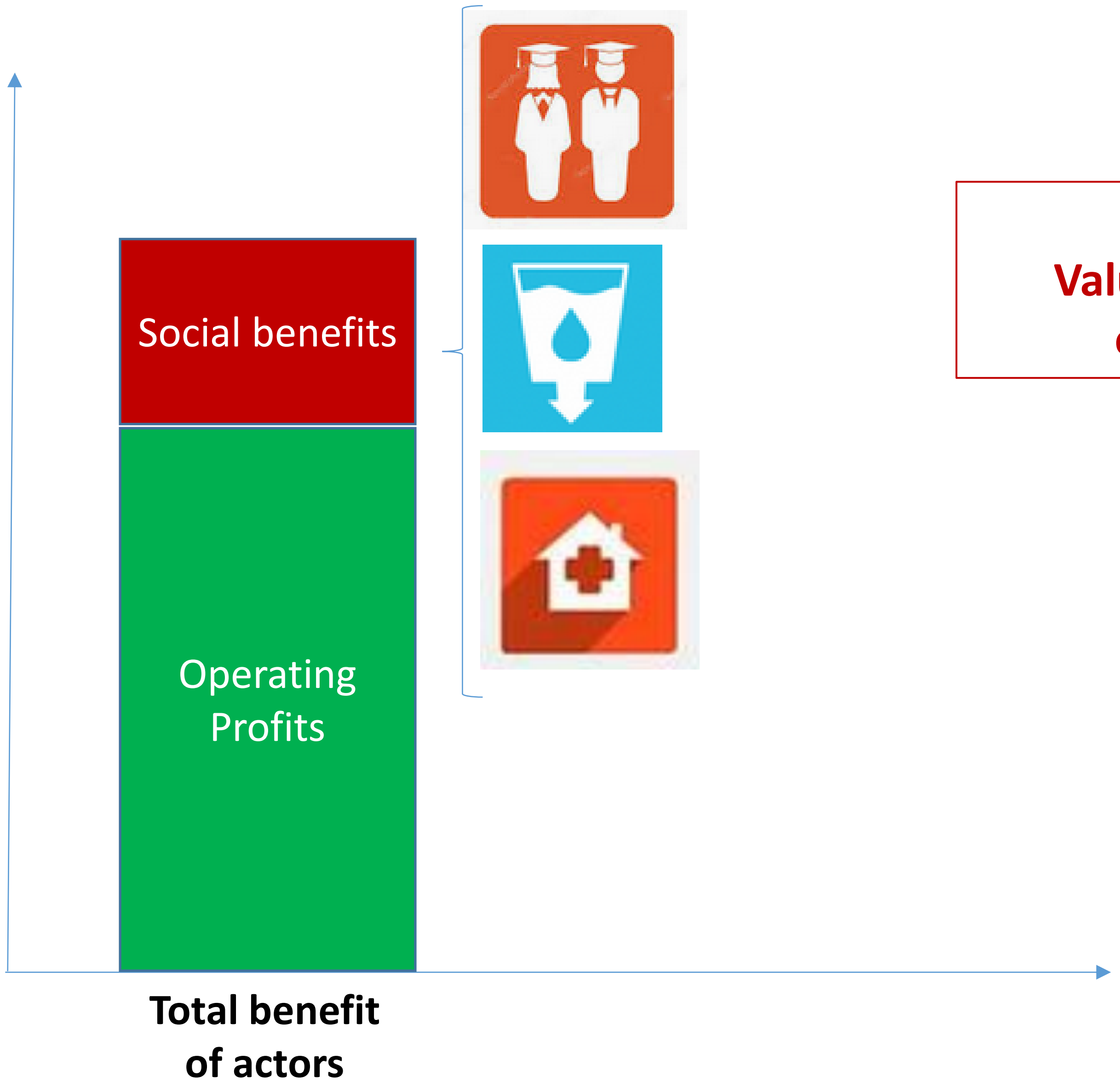


Wages distribution at various stages of the VC

Wages and farmers' incomes account for 42% of the net income of the whole VC. This suggests a medium level of inclusiveness. Farmers retain 31% of the income created within the VC representing a high return on family labour across the different farming models.

The wages are relatively small in the VC (11%) showing that the structure of the farming systems have normalised around family, rather than external labour models. However, wages are significant at the level of commercial farms (28%) and catering establishments that include fast food chains, small restaurants and food outlets (also 28%) because the VC is important for the domestic consumption.

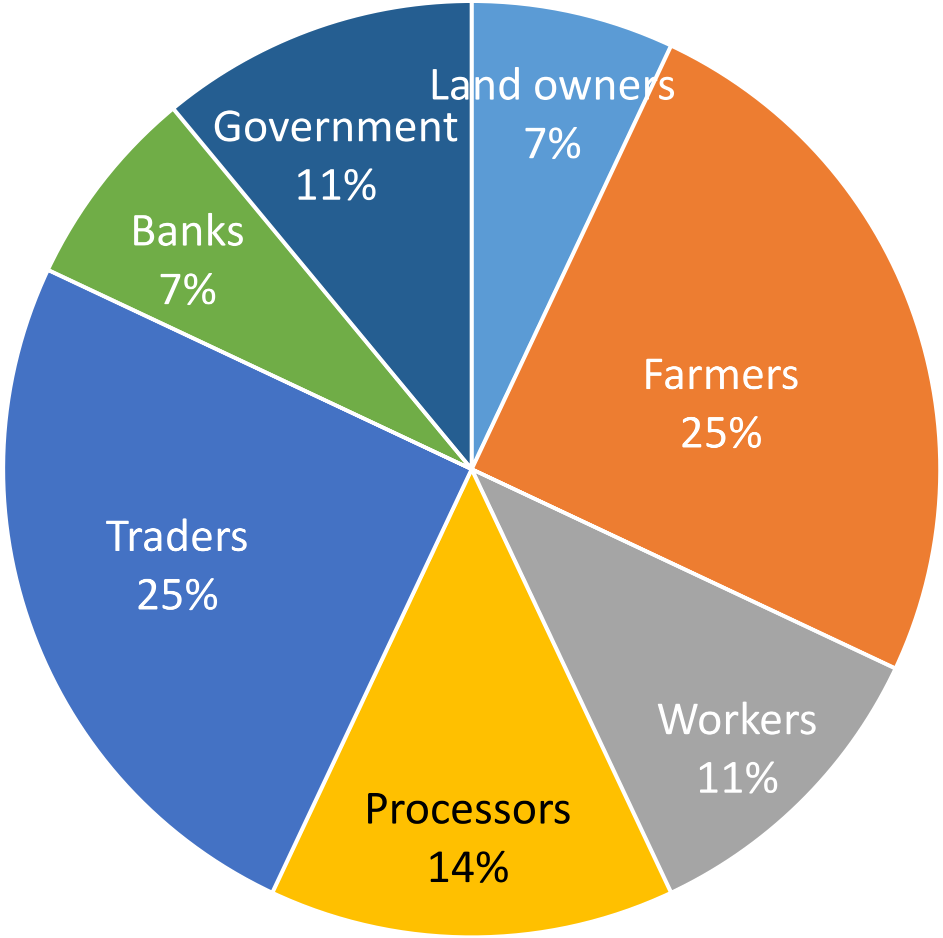
CQ 2.1 : How is income distributed across actors of the value chain?



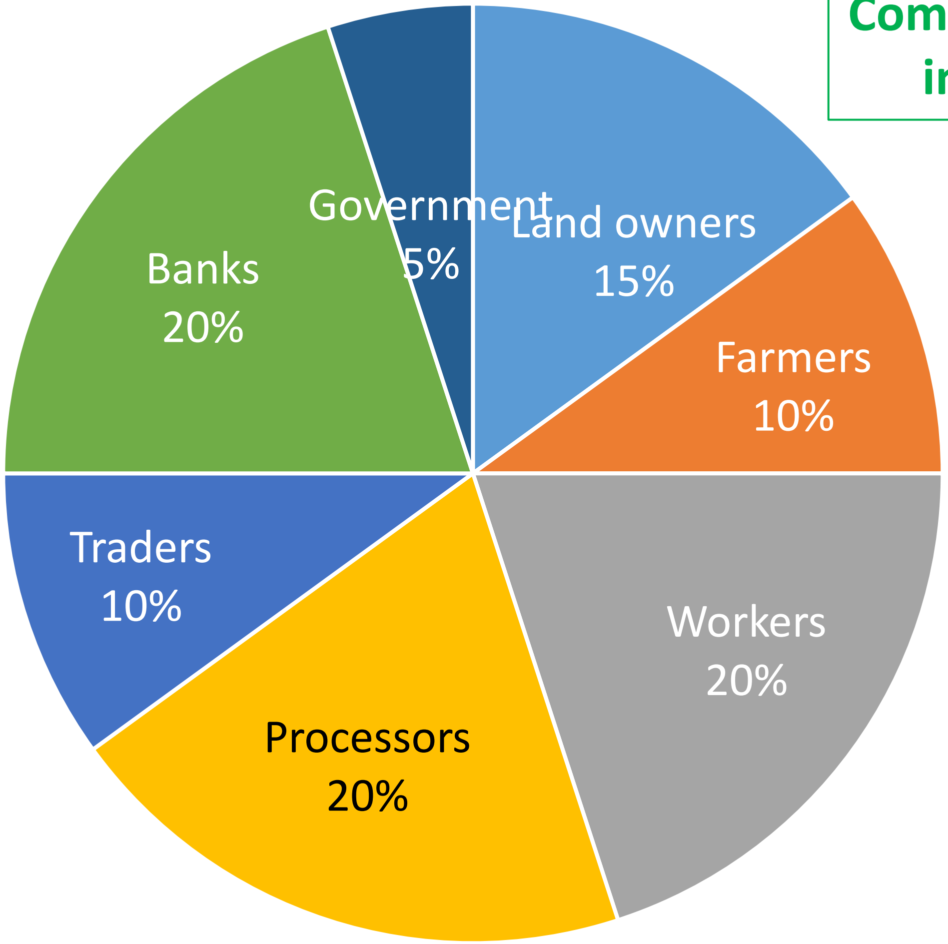
Indicator:
Value of social benefits of all kinds bestowed by VC operators (plantations, cooperatives, firms…)

CQ 2.1 : How is income distributed across actors of the value chain?

Indicator:
Comparison of sub-chain's income distribution



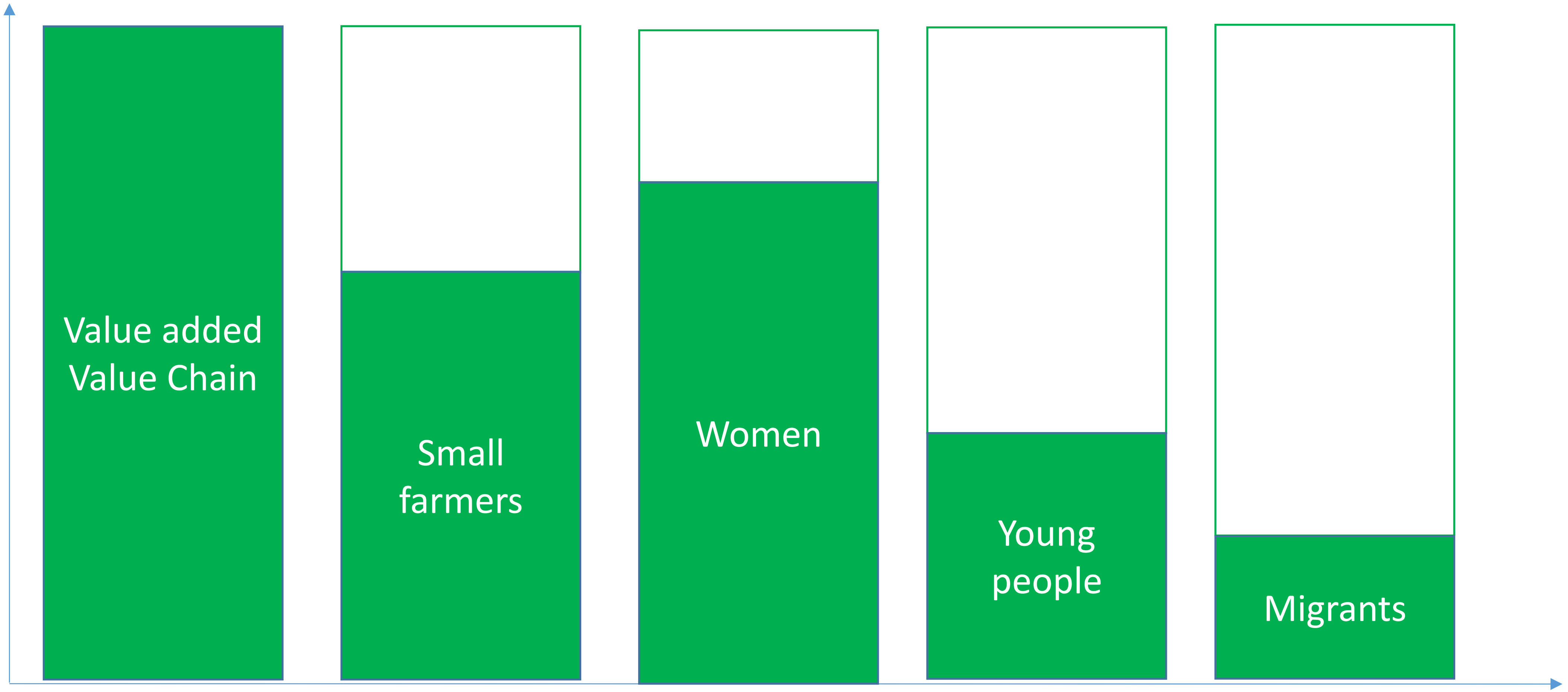
Sub-chain A / with contract



Sub-chain B / without contract

CQ 2.1 : How is income distributed across actors of the value chain?

Indicator:
Total income accruing to marginalized and vulnerable groups

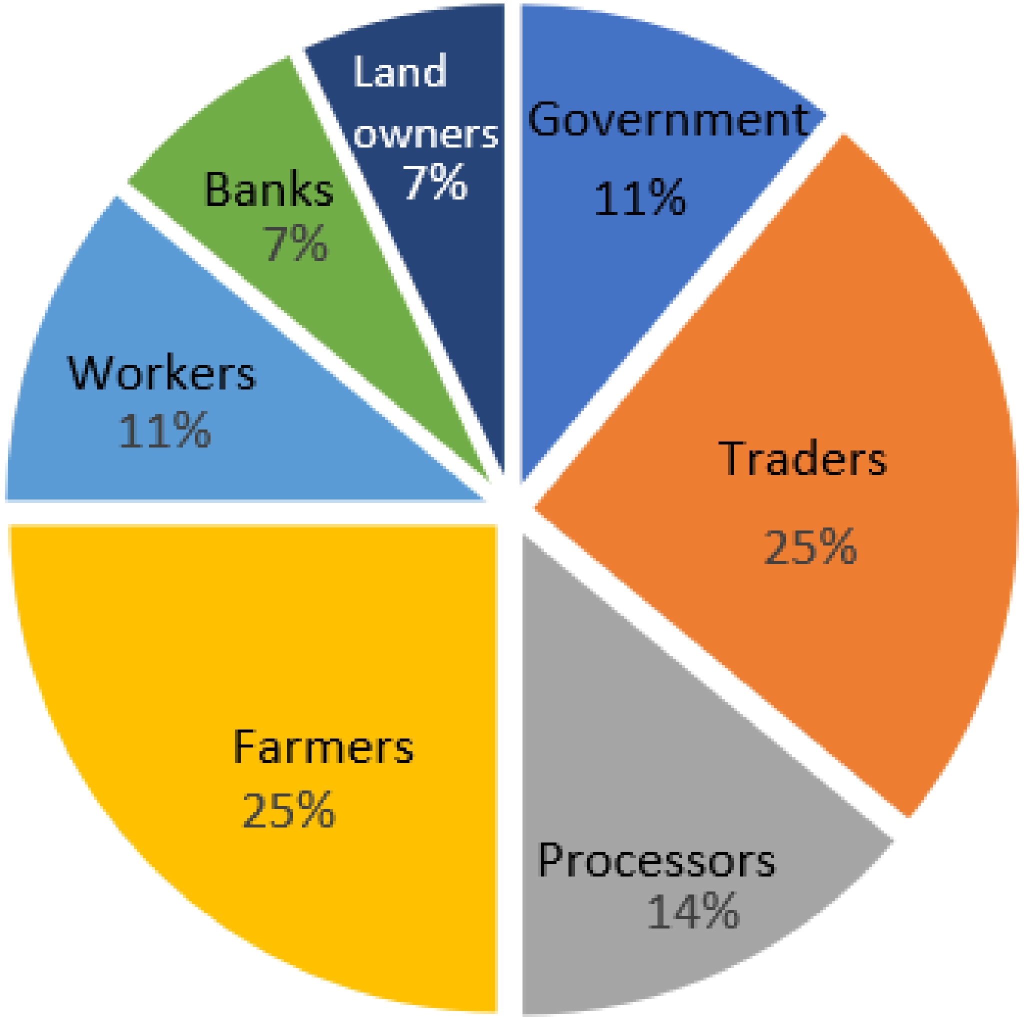


New !

Core Question 2.2: What is the impact of the governance systems on income distribution?

Indicators: **Income distribution among actors**; **Share of farm gate price in the final price (%);** Income Gini Index.

CQ 2.2: What is the impact of the governance systems on income distribution?

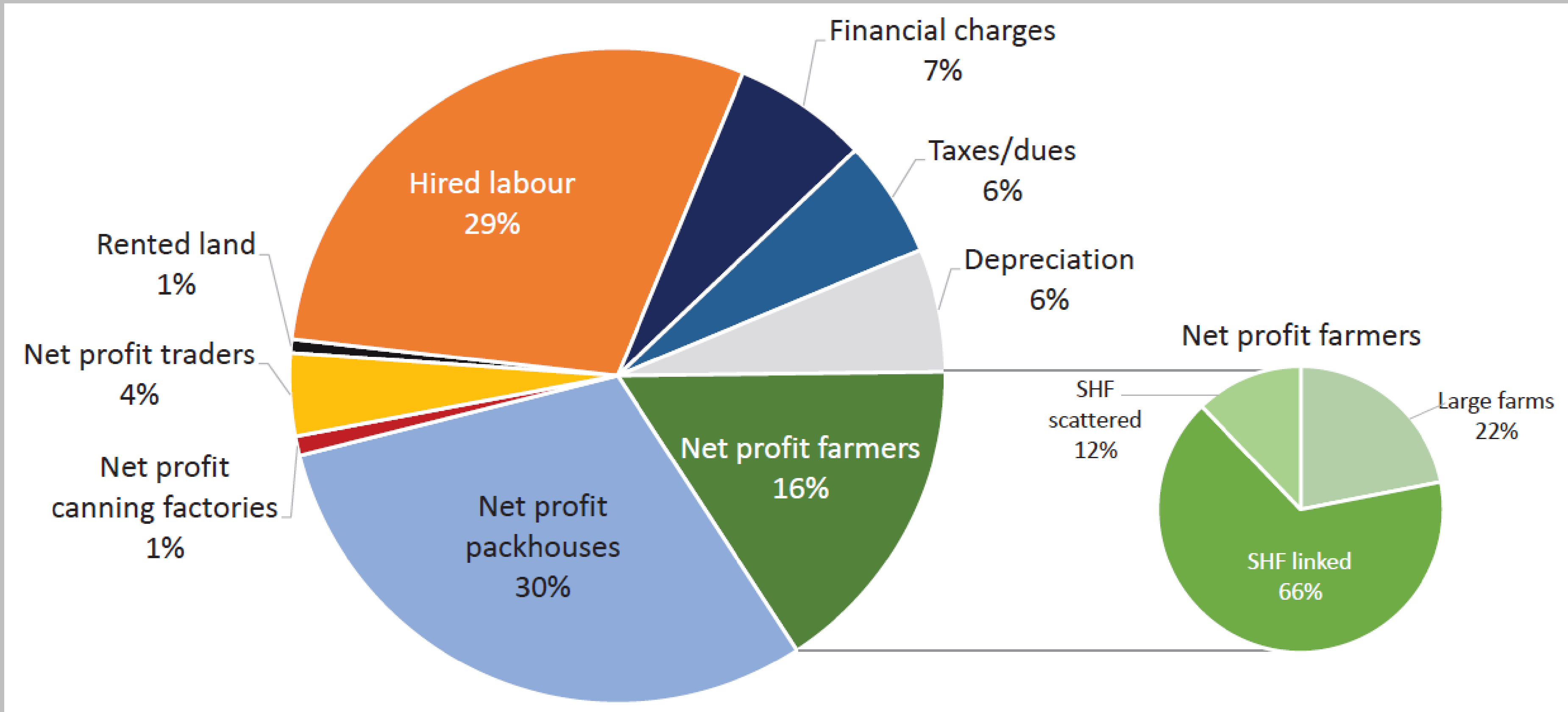


Indicator: Income distribution among actors

Green Beans Kenya

The two main parts of the VA are: (i) the net profit of packhouses and (i) the wages to hired labour both in packhouses and farms.

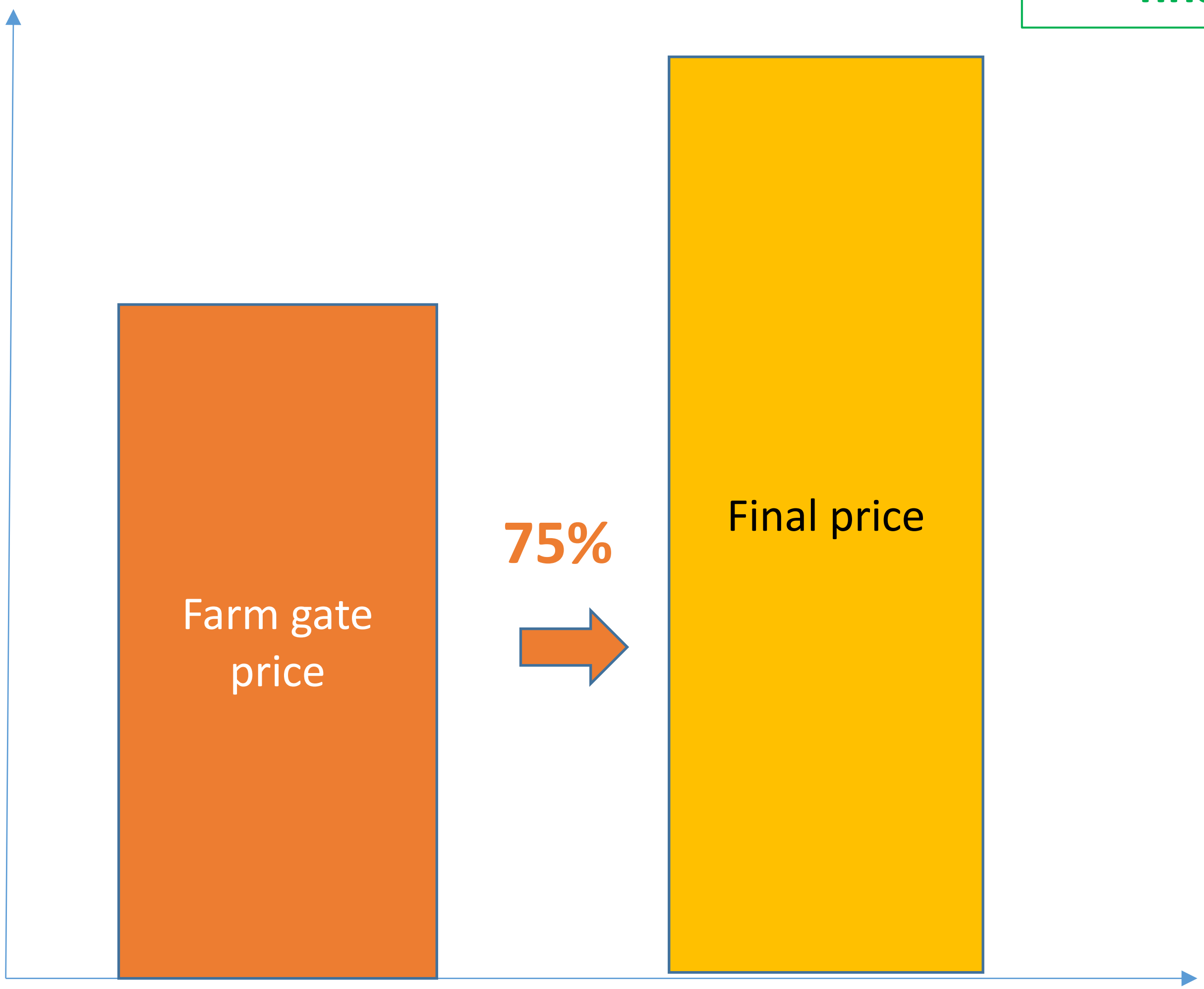
Even smallholder farmers employ hired workers for labour intensive activities. such as harvesting. It is large-scale producers and SHF with links to exporters that generate the highest value addition in the agricultural part of the VC.



VA distribution

CQ 2.2: What is the impact of the governance systems on income distribution?

Indicator:
Share (%) of farm gate price in the final price inside the country

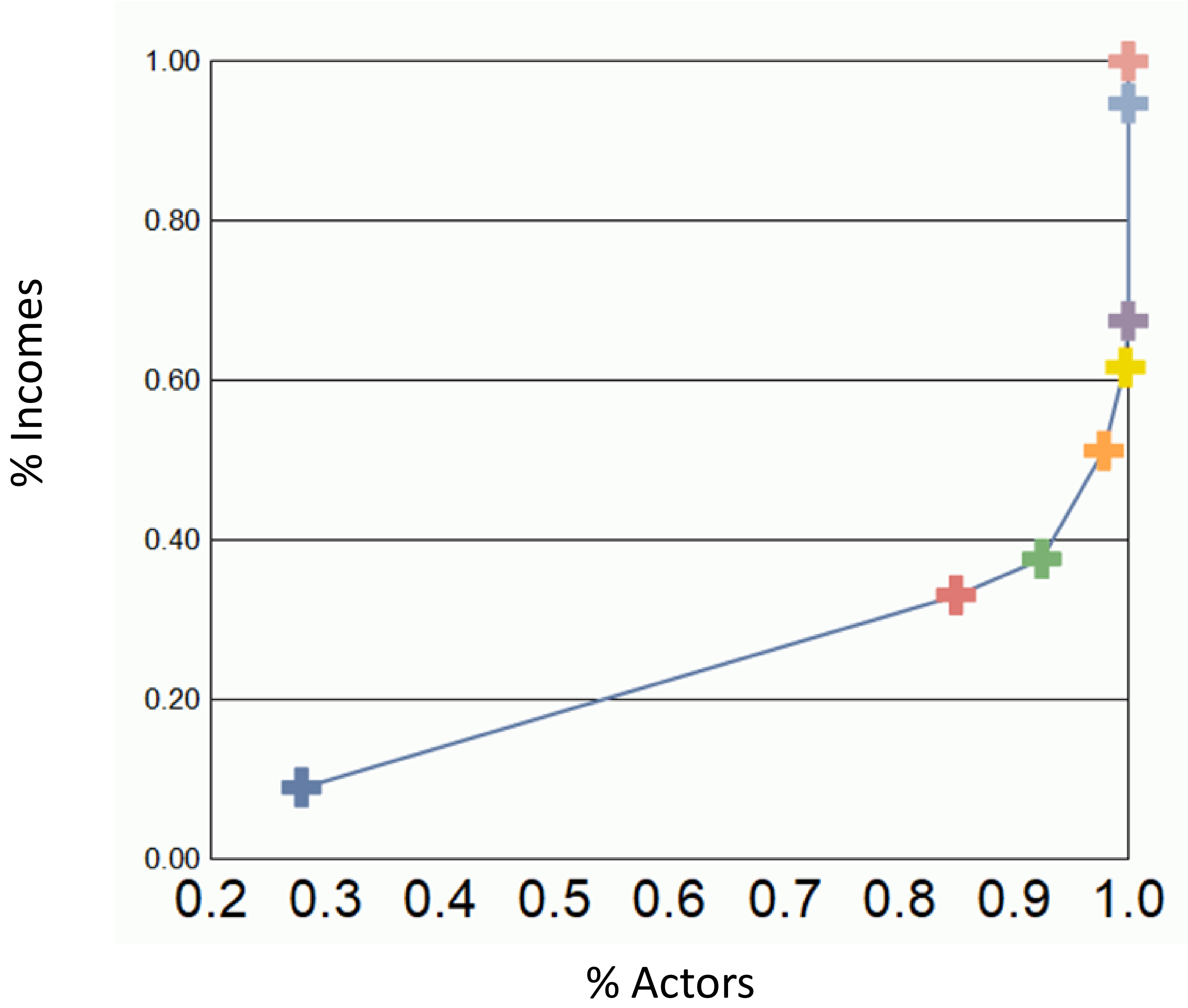


Cocoa Sao Tome

Cocoa Papua New Guinea

The very favourable distribution of cocoa revenues to smallholders is evidenced by a very high ratio - around 80% - between the delivered-in-store (DIS) purchase price to national producers and the Free-on-board (FOB) selling price in the international market.

CQ 2.2: What is the impact of the governance systems on income distribution?



Indicator:
Income Gini Index

0.6212
0: Fair distribution
1: Totally inegalitarian

Beef Swaziland

The country has a long-standing income inequality even if the Gini index declined at a moderating rate to shrink from 0.61 index in 1994 to 0.52 in 2009 (World Bank, 2017). In a recent document provided by the Ministry of Agriculture, it was stated that the richest 19 percent of the population controls 56 percent of total income, while the poorest 19 percent controls only 4.3 percent (MOA, 2016).

Despite its valuable contribution to the GDP, the beef value chain does not escape to the overall country's situation characterized by a pronounced uneven income distribution. The tabulated Gini index for the Beef value chain is largely higher than 0.50 reaching 0.80 during the VCA4D investigation period.

Thus, poor households in livestock usually must seek alternative income sources and have low per capita incomes. One aspect of diversification, the presence of salaried income, has an especially dramatic effect on total income, but is an advantage enjoyed by relatively few households

New !

Core Question 2.3: How is employment distributed across the VC?

Indicators: **Number of jobs** (family, self- and formal employment) **at different VC stages** (permanent/temporary, skilled/unskilled…); **Employment of women;** Employment of marginalized and vulnerable groups.

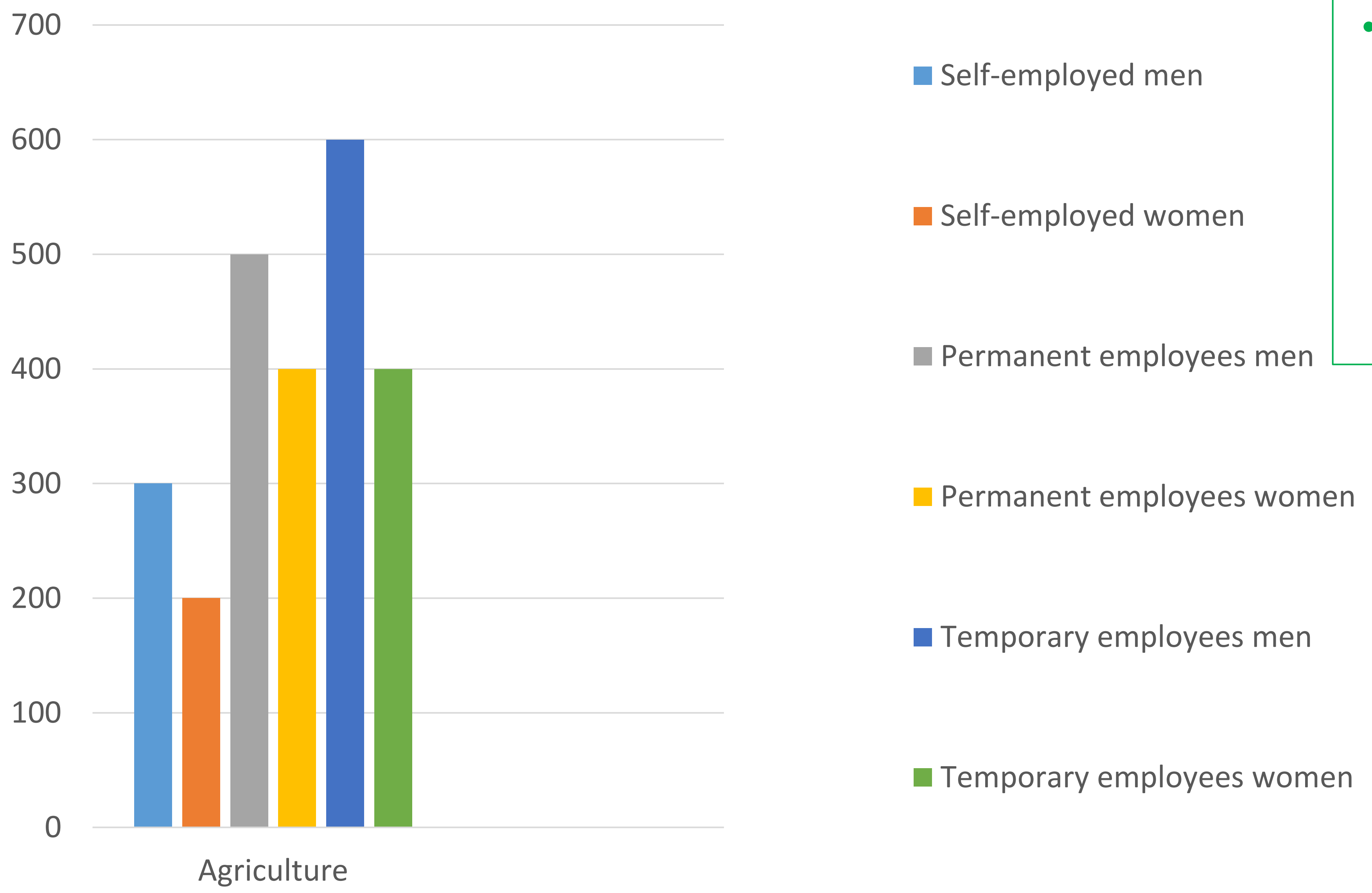
CQ 2.3: How is employment distributed across the value chain?

Jobs and self-employment → Expressed by the number of people involved and Full-Time Equivalents (FTE)

Jobs →

- **Full time and part-time occupation** at farms and family businesses (family workforce and seasonal labourers)
- **Employees of formal sector** enterprises upstream and downstream, and public services

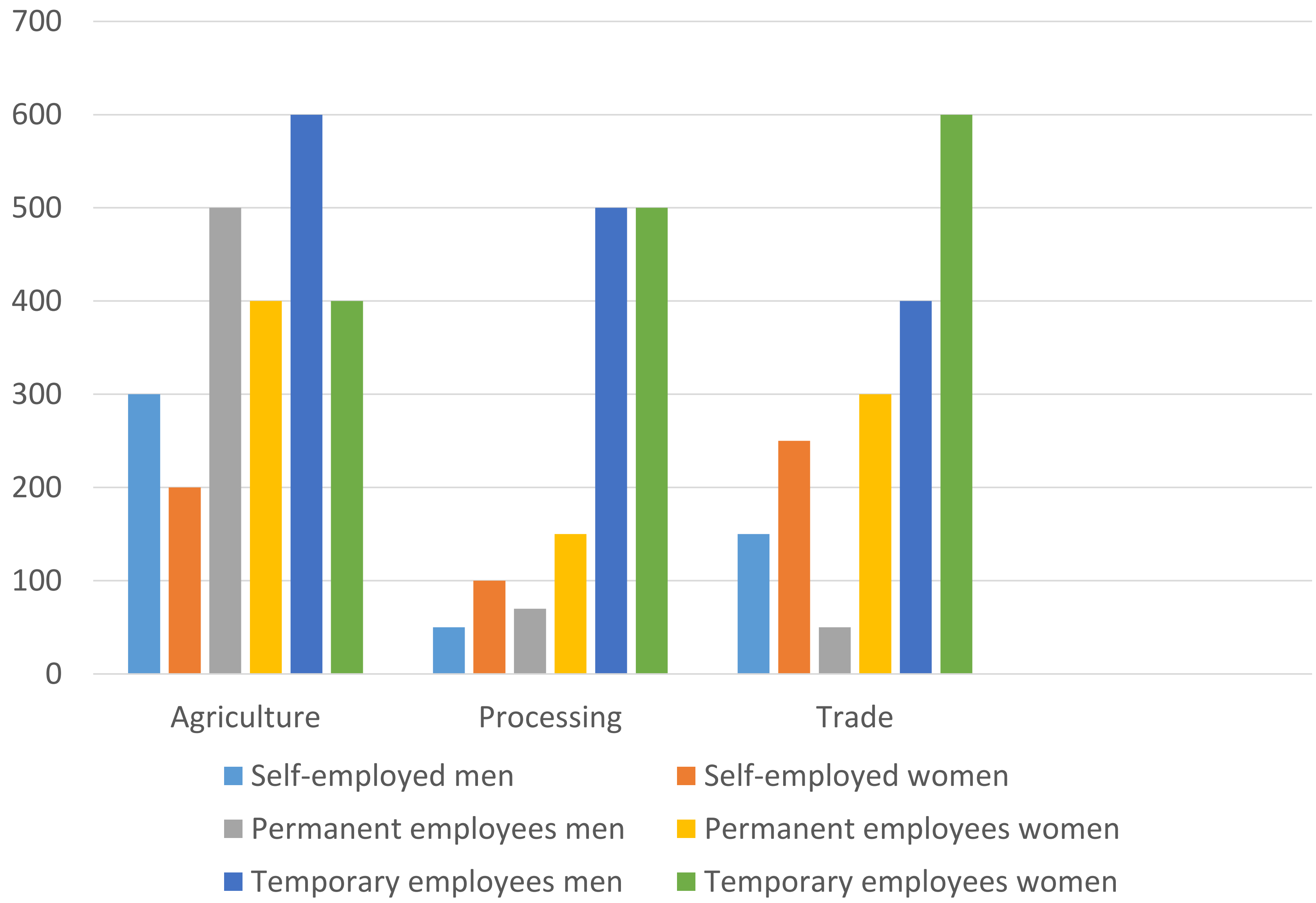
CQ 2.3: How is employment distributed across the value chain?



Indicators:

- **Number of jobs (family, self and formal employment) at different VC stages (permanent/temporary, skilled/unskilled)**
- **Employment of women**

CQ 2.3: How is employment distributed across the value chain?



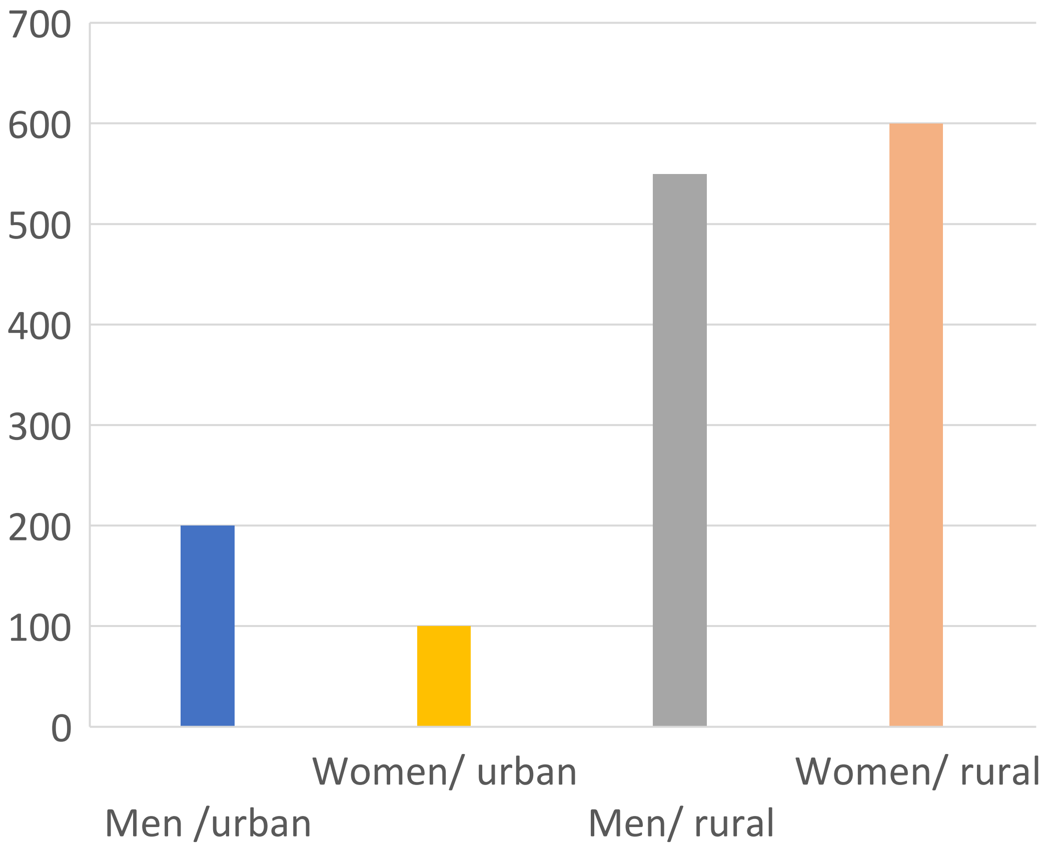
Indicators:

- **Number of jobs (family, self and formal employment at different VC stages (permanent/temporary, skilled/unskilled)**
- **Employment of women**

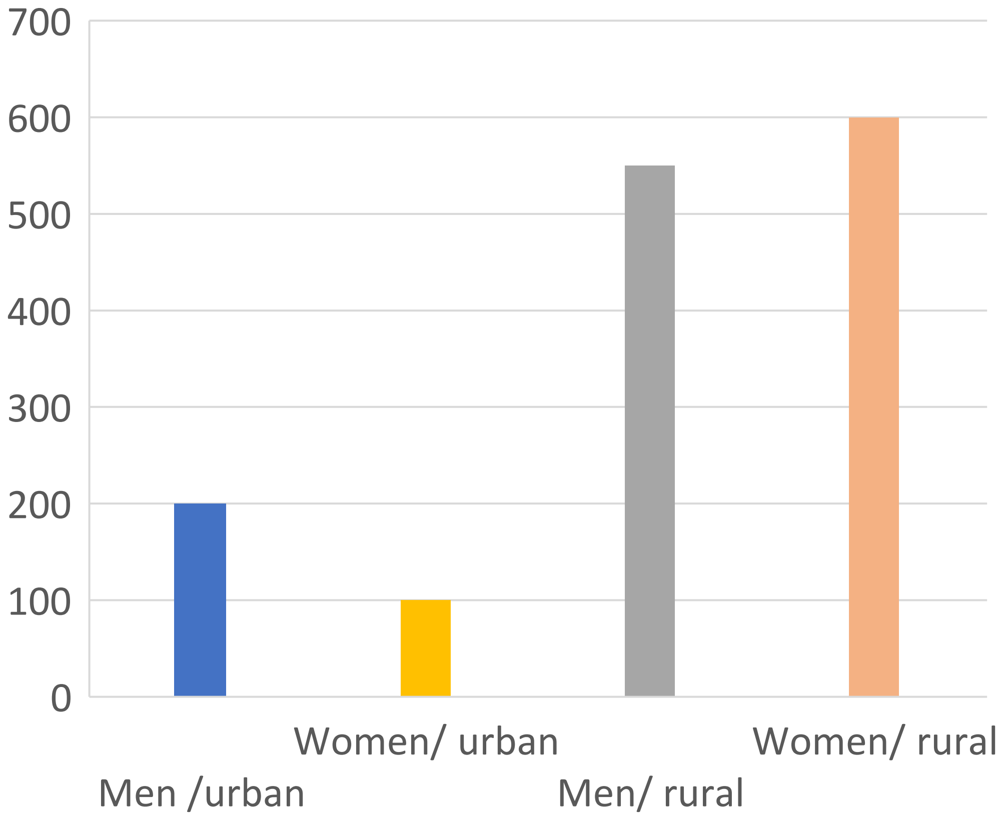
CQ 2.3: How is employment distributed across the value chain?

New !

Indicator:
Employment of marginalized and vulnerable groups



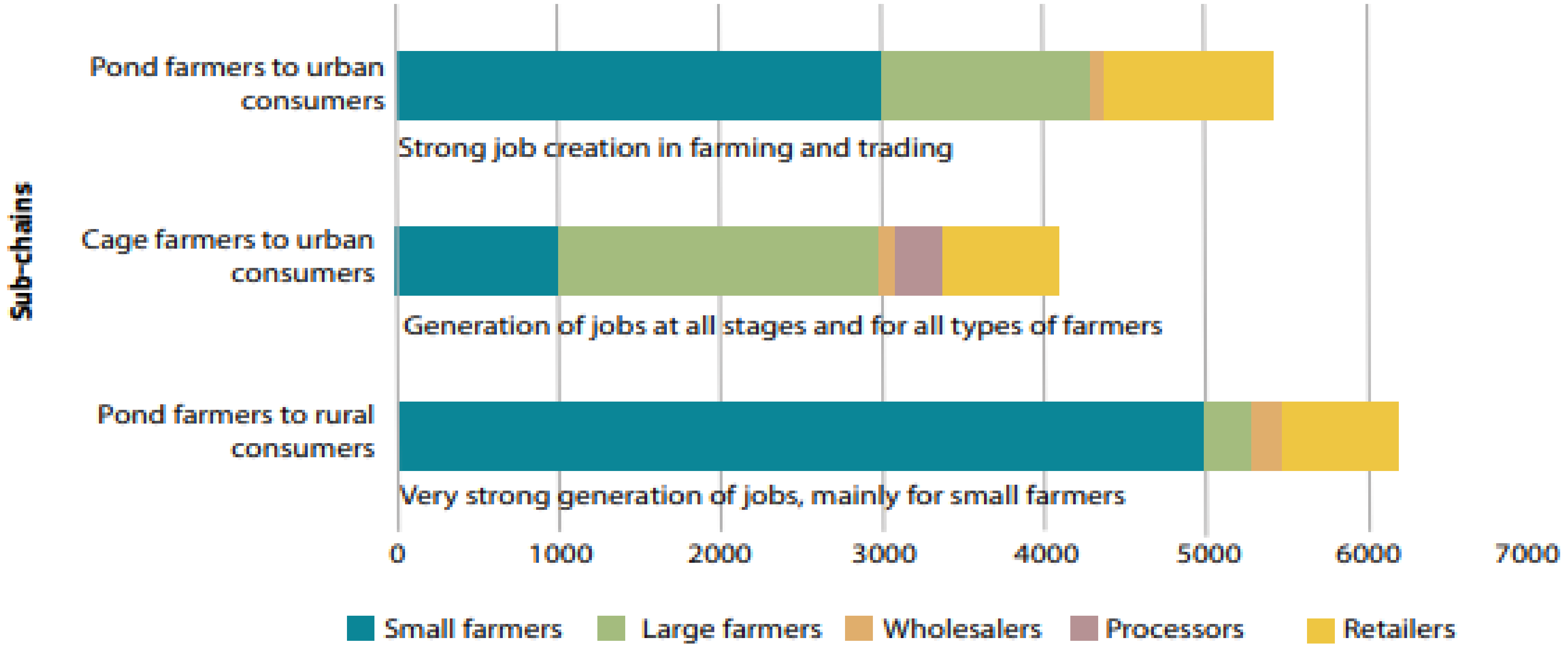
Skilled jobs in Processing



Unskilled jobs in Processing

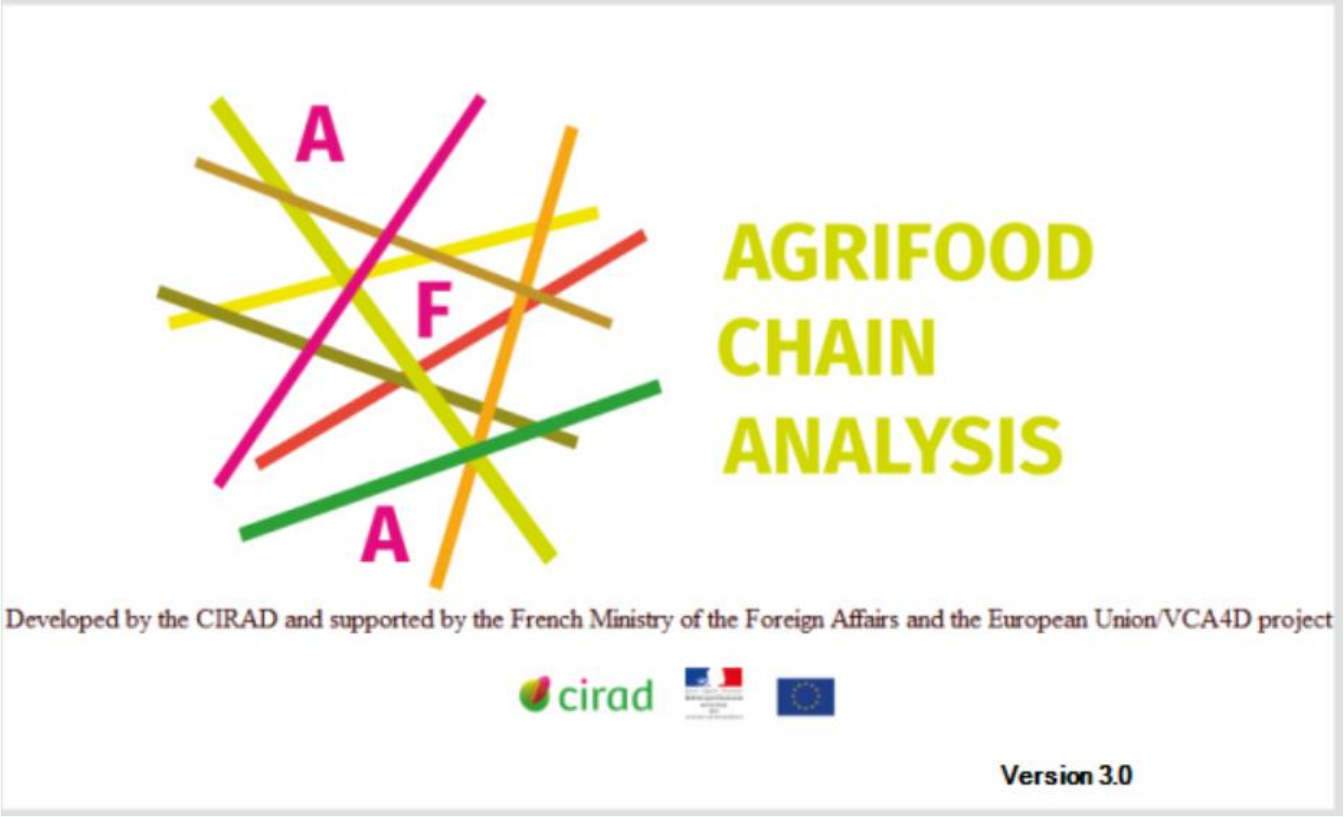
CQ 2.3: How is employment distributed across the value chain?

Comparison of sub-chain's employment distribution



CQ 2.3: How is employment distributed across the value chain?

New !



The AFA software calculates the distribution of incomes and the number of jobs.

CQ 2.3: How is employment distributed across the value chain?

Value chain : 3 - Rice exemple version 3 Country : Africa Curency : CFA Year : 2007

Coefficient Board

Acronym	Wage	TM	TF	PUM	PUF	PSM	PSF
PRPL	50 000	0.50	0.50	0.00	0.00	0.00	0.00
PPRI	5 000	0.70	0.30	0.00	0.00	0.00	0.00
COLL	1 000	1.00	0.00	0.00	0.00	0.00	0.00
GRPD	295	0.30	0.00	0.70	0.00	0.00	0.00
DECO	1 151	0.50	0.00	0.20	0.00	0.30	0.00
GRR1	135	0.30	0.00	0.70	0.00	0.00	0.00
GRR2	45	0.30	0.00	0.70	0.00	0.00	0.00
IMPO	40	0.10	0.00	0.50	0.00	0.40	0.00
SUPE	356	0.20	0.30	0.20	0.00	0.30	0.00
DETA	0	0.00	0.00	0.00	0.00	0.00	0.00
CBRAN	0	0.00	0.00	0.00	0.00	0.00	0.00
	58 021	**3.90**	**1.10**	**3.00**	**0.00**	**1.00**	**0.00**

Parameter Dictionnary

Parameter	Value	Time Unit
Temporary Male	5.00	Day
Temporary Female	3.00	D
Permanent Unskilled Male	15.00	Day
Permanent Unskilled Female	10.00	D
Permanent Skilled Male	25.00	D
Permanent Skilled female	20.00	D

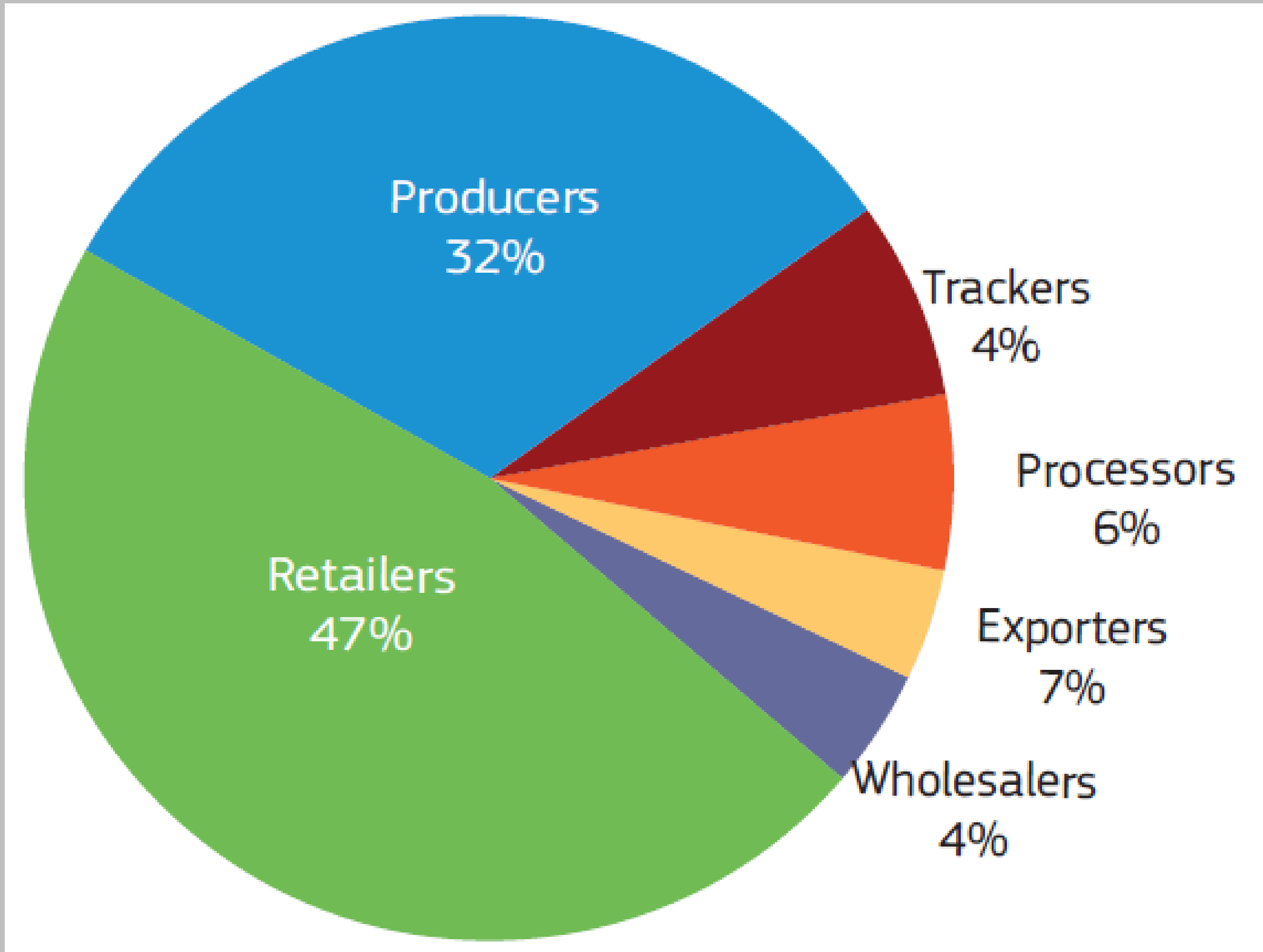
Absolute Values Board

Acronym	Temporary Male	Temporary Female	Permanent Unskilled Male	Permanent Unskilled Female	Permanent Skilled Male	Permanent Skilled Female	Total Temporary	Total Permanent Unskilled	Total Permanent Skilled	Total Male	Total Female
PRPL	25 000	25 000	0	0	0	0	50 000	0	0	25 000	25 000
PPRI	3 500	1 500	0	0	0	0	5 000	0	0	3 500	1 500
COLL	1 000	0	0	0	0	0	1 000	0	0	1 000	0
GRPD	89	0	207	0	0	0	89	207	0	295	0
DECO	575	0	230	0	345	0	575	230	345	1 151	0
GRR1	41	0	95	0	0	0	41	95	0	135	0
GRR2	14	0	32	0	0	0	14	32	0	45	0
IMPO	4	0	20	0	16	0	4	20	16	40	0
SUPE	71	107	71	0	107	0	178	71	107	249	107
DETA	0	0	0	0	0	0	0	0	0	0	0
CBRAN	0	0	0	0	0	0	0	0	0	0	0
	30 293	**26 607**	**654**	**0**	**468**	**0**	**56 900**	**654**	**468**	**31 414**	**26 607**

Mango Burkina

The VC is a provider of employment. Its activities employ around 28,000 people: 21,000 as entrepreneurs or similar (farmers, trackers, retailers, etc.), about 350 in permanent jobs in processing and packaging for export of fresh mango, and 6-7,000 in seasonal jobs throughout the chain.

The seasonal marketing of fresh mango in the local market also supports nearly 10,000 retailers. The total salaries across the chain amount to FCFA 1.2 billion.



Distribution of direct employment: number of people working across the whole VC (part of the year)

Indicator table to be inserted at the end of the inclusiveness analysis

Framing Question 2: Is this economic growth inclusive? *(To be completed with Social Analysis results)*		**INDICATORS**	**RESULTS IN THE STUDY**
CQ2.1	How is income distributed across actors of the VC?	**Disaggregated VA**	
		Total farm income	
		Total wages and salaries	
		Total income accruing to marginalized and vulnerable groups.	
CQ2.2	What is the impact of the governance systems on income distribution?	**Income distribution**	
		% final price at farm gate	
CQ2.3	How is employment distributed across the VC?	**Number of jobs and self-employment**	
		Employment of women	