

CURRENT SITUATION
OF VIETNAMESE
AGRICULTURAL
COOPERATIVES AND
ITS LOGISTICS TO
ENTER THE GLOBAL
SUPPLY CHAIN

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#### PERSONAL PROFILE

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# **Outlines**

1. Context	5. Challenges of Vietnamese agricultural logistics systems
2. Vietnamese agricultural cooperatives	6. Requirements of Vietnamese Cooperatives' logistics
3. Supply chains of agricultural product	7. Benefits of strong cooperatives and logistics
4. Logistics in supply chain of agricultural product	8. Take-home message



# 1. Context Vietnam and Mekong Delta





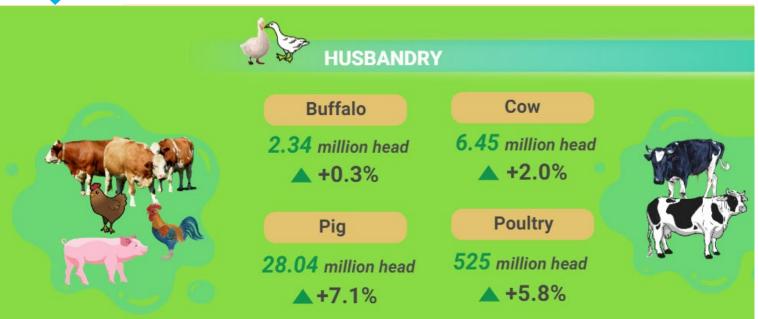
### Overview of Vietnamese Agriculture



Source: MARD, 2021



### Overview of Vietnamese Agriculture (Cont.)





Source: MARD, 2021

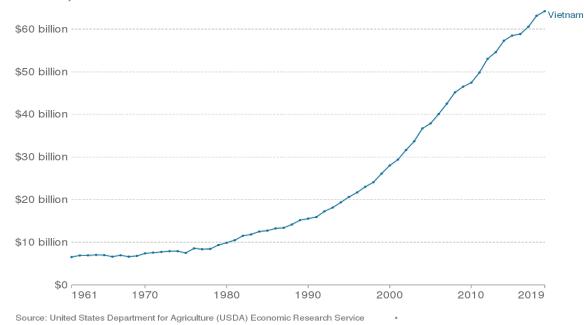


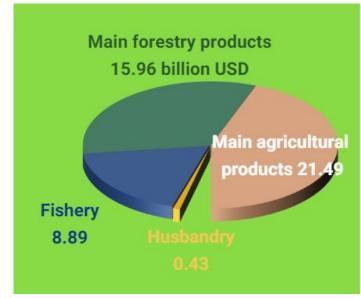
# Vietnamese agricultural value

#### Agricultural output, 1961 to 2019



Total agricultural output is the sum of crop and livestock products. It is measured in constant 2015 US\$, which means it adjusts for inflation.





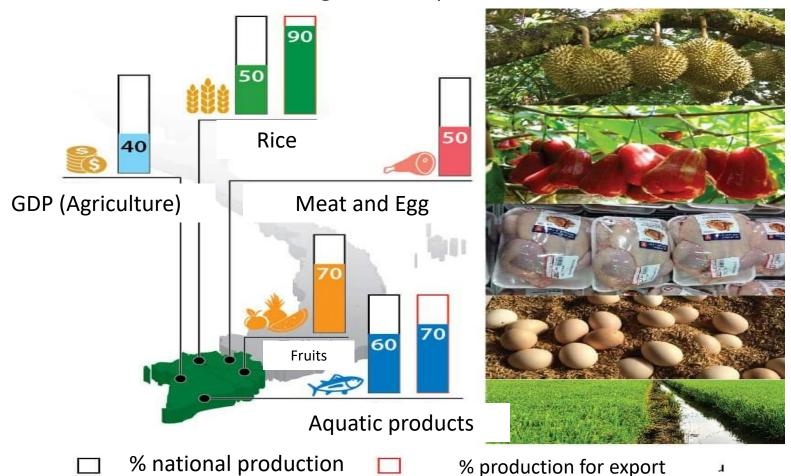
Source: MARD, 2021



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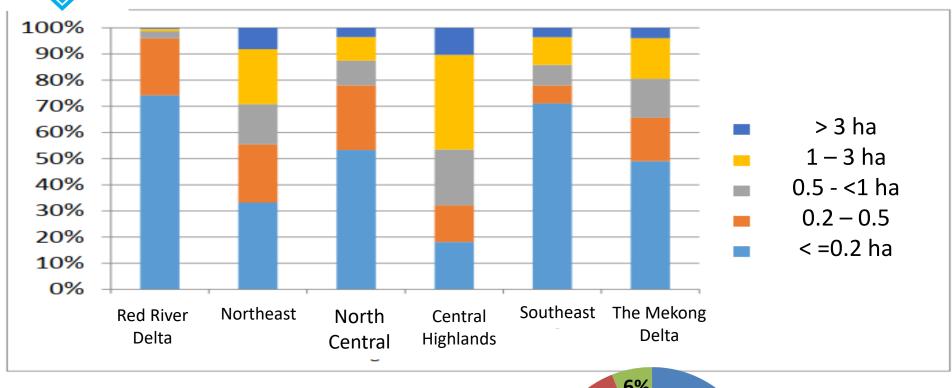
### Roles of the Mekong Delta in Agriculture sector

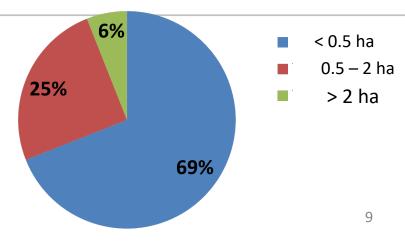
The most important region amongst 7 ecological regions in agricultural production





### Land feature





Source: Toan, 2022; Phuc, 2022



## Context for Vietnamese Agriculture

- Integration to the global market: High demand on food; FTA (Free Trade Agreements); standard certifications, etc.
- High competition
- Low added value => Logistic in agriculture, value chain production
- Risk in production/climate change
- Small-scale but lack of linkages, planning
- Requirements of the new style commune policy Etc.



=> It is necessary to organize and develop appropriate production forms to manage well, sell products and apply advanced production techniques.



# 2. Vietnamese agricultural cooperatives







### History of Vietnamese Cooperative Economics

In Vietnam, agricultural collective economics have a long history of establishment and development from the 1950s. This business model has experienced several stages of rises and falls (Khiem et al., 2010).

Old style cooperative "Tập đoàn"

Cooperative Law in 2003, amendments in 2006, 2012 and 2023, aiming to promote the new style cooperatives and collective economics.

Policies for promoting collective economics: cooperatives and farming clusters



# Number of Agricultural Cooperatives

Forms of cooperatives	2013	2021	Difference (%)
Cultivation Cooperatives	1575	5863	272.3
Husbandry Cooperative	319	1034	224.1
Aquaculture & Fisheries Cooperatives	476	1005	111.1
General agricultural cooperatives	6678	8927	33.7





### Purposes to establish rice cooperatives

Reason	% of surveyed cooperative
Linking in production	64.2
Production experience exchange	39.5
Fulfill the requirement for new-style	30.9
communes	
Mutual supports in life	16.1
Get supports	12.3



### **Scale of cooperative**

Indicators	Mean	Max	Min	STDEV
No. of years from establishment (years)	6.1	22	2	3.4
No. of member in the established year (people/cooperative)	39	538	7	69
No. of member in the 2022 (people/cooperative)	55	538	8	80
No. of member who are government staff (people/cooperative)  Total production are of whole member (Ha/cooperative)	6 149	30 1.400	<u>0</u> 5	9 233.2



### Scale of cooperative by member

Scale by member	Ratio (in the established year)	<b>Ratio (in 2022)</b>
< 50 member (super small)	81.48	69.13
50 - 300 member (small)	16.04	27.16
> 300 -1,000 member (Medium)	2.46	3.70
Total	100	100



### Scale of cooperative by capital

Indicator	Mean	Max	Min	STDEV
Charter capital (1,000 USD)	13	95.7	0.5	14.8
Total joined capital of member at the established year (1,000 USD/cooperative)	9.17	95.7	0.34	14.7
Total joined capital of member in 2022 (1,000 USD/cooperative)	15.5	152.2	0.44	25.1

Survey 75 rice production cooperative in HG, ST and TV, 2022; exchange ratio 1 USD = 23000



### Financial status of cooperative

Indicator	Mean	Max	Min	STDEV
Total revenue	9,615	83,870	2,261	206.26
(USD/cooperative/year)				
Total cost	8,896	27,391	1,304	154.53
(USD/cooperative/year)				
Net profit	2,732	17,348	304	85.39
(USD/cooperative/year)				
Marginal ratio	0.56	2.39	0.03	0.73

Survey 75 rice production cooperative in HG, ST and TV, 2022; exchange ratio 1 USD = 23000



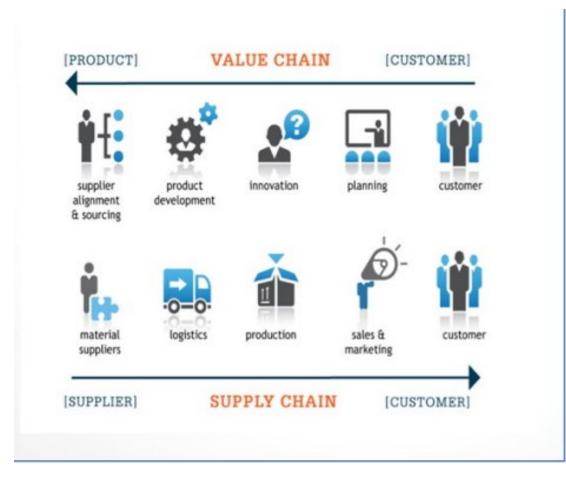
# 3. Supply chains of agricultural product and position of cooperative

#### Value chain:

- Focus on added value
- Based on customer's demand
- Adjust and innovation
- Reducing operation cost of the chain

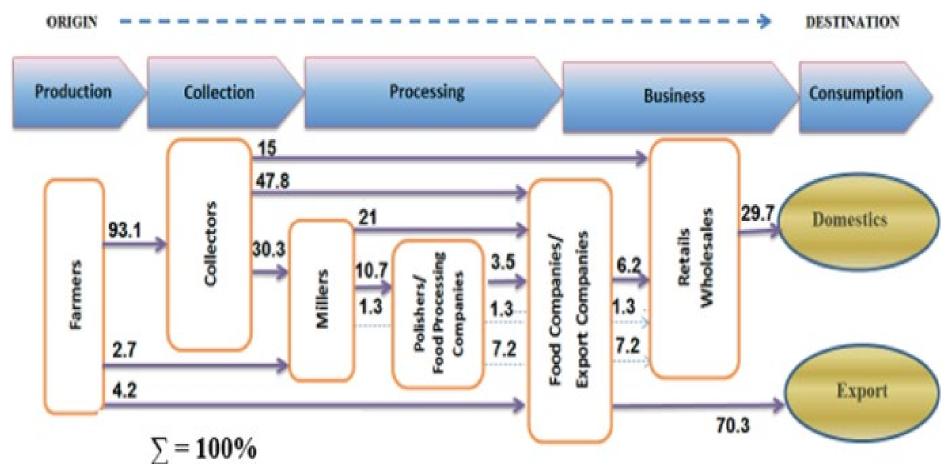
#### Supply chain:

- Focus on the route of product
- Focus on solutions for smooth and effective product





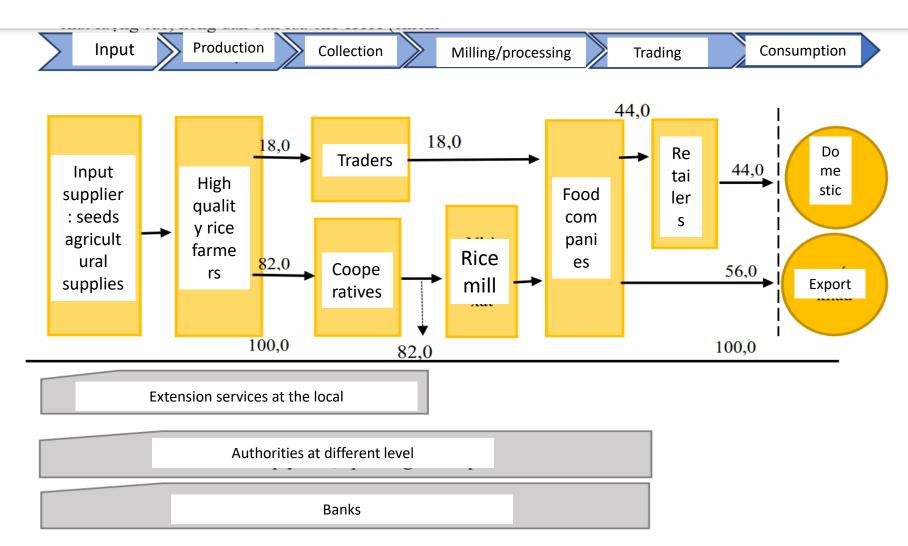
### Rice value chain in the Mekong Delta



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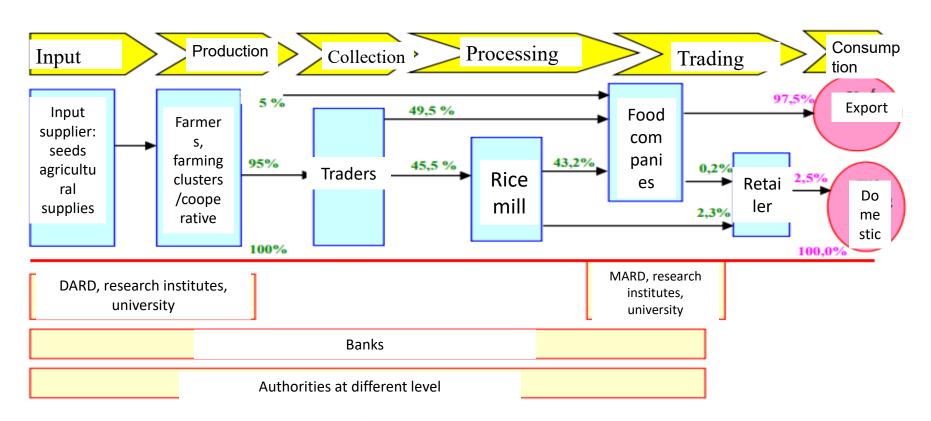
# Value chain of high-quality rice with participation of cooperatives in An Giang



Source: Dung, 2021

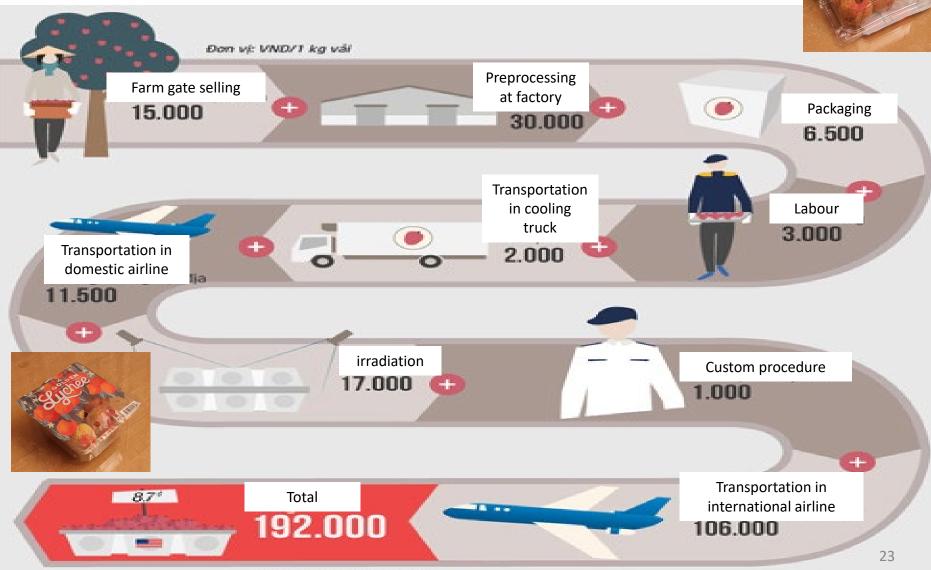


### Value chain of ST25 and position of cooperative



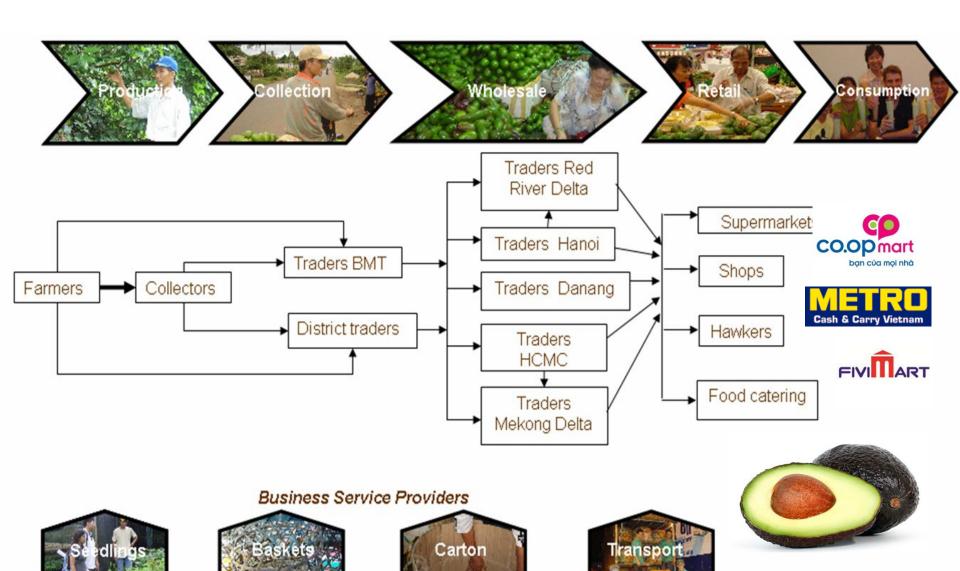


# Value chain of Vietnamese Lychee



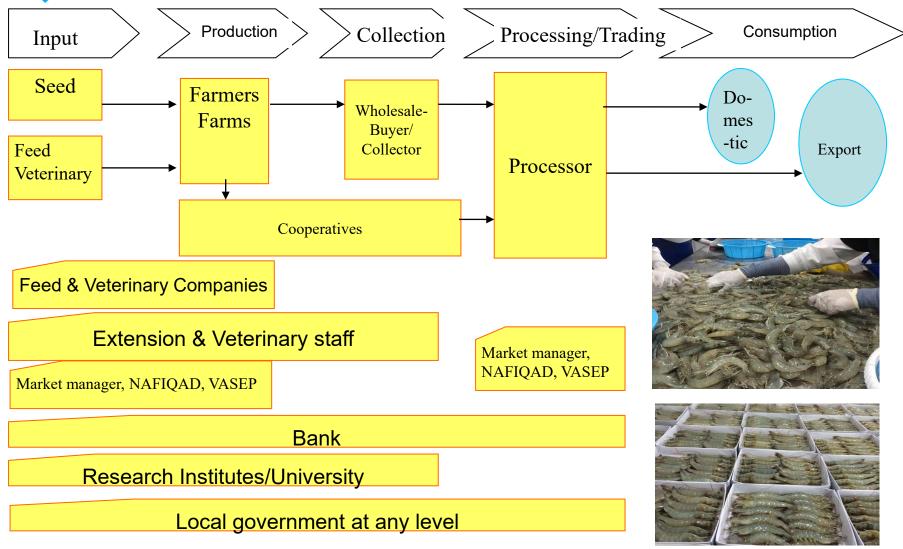


# Avocado supply chain





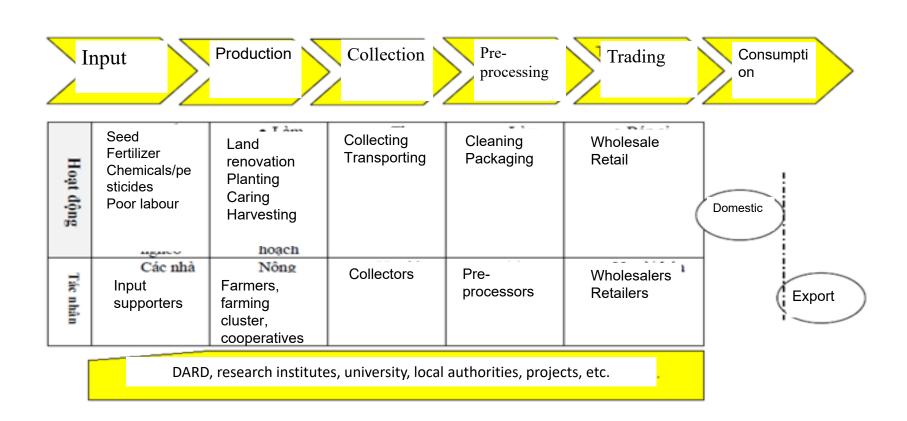
### Map of shrimp value chain in the Mekong Delta



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### Value chain of coffee and position of cooperative

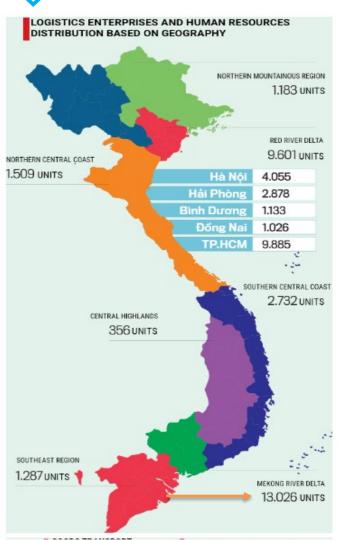


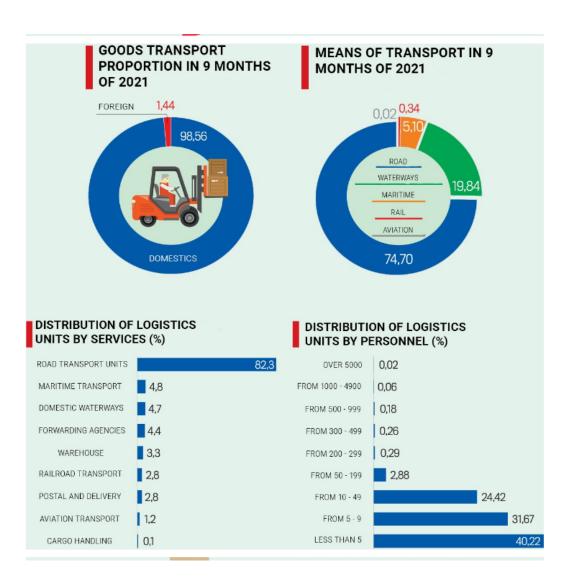
# 4. Logistics in supply chain of agricultural products





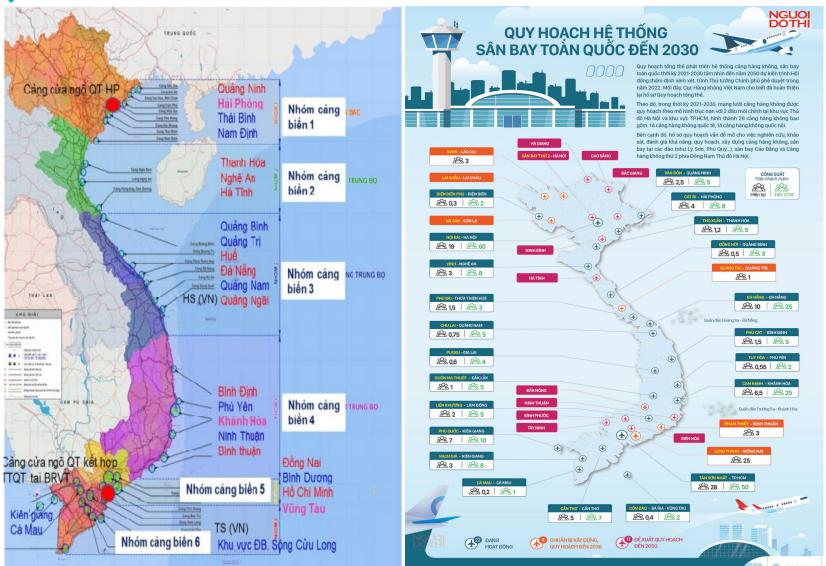
### An overview of Vietnamese logistic system





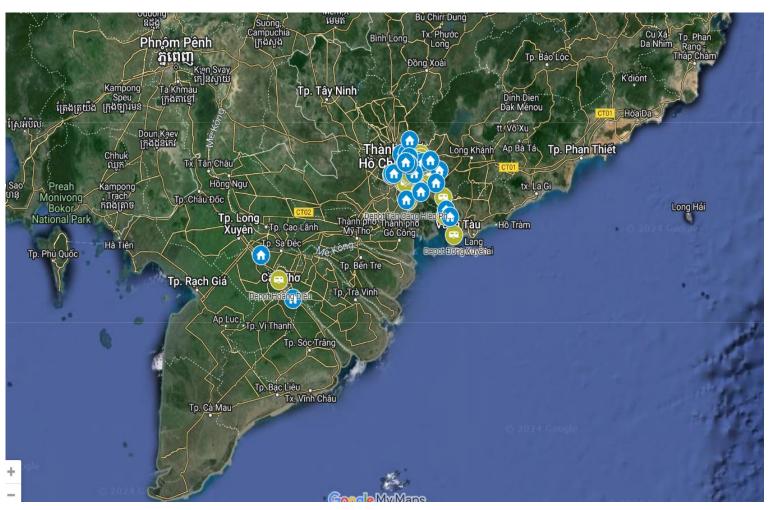


# Map of ports and airports





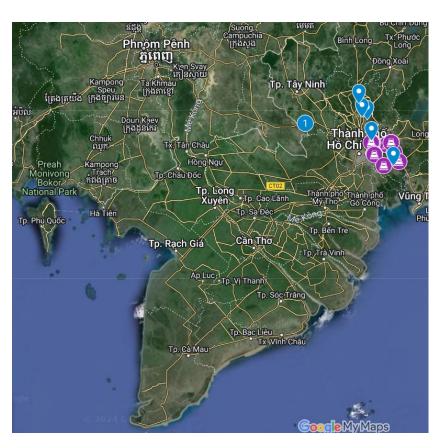
### Depot and warehouse

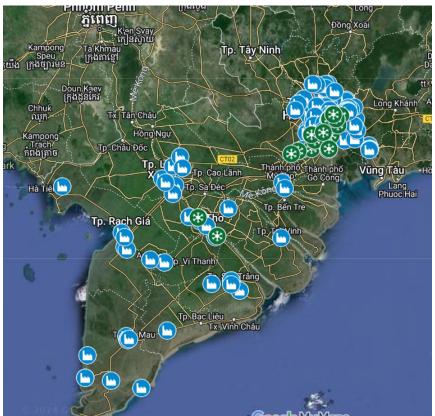


 $https://www.google.com/maps/d/u/0/viewer?fbclid=lwAR0xb8T1bM0FTh6t6XyXevzQhqdCP7n8dAV8VCSUFsJZTLZxK3RcXd\_W20Q&ll=10.29796636974099\%2C106.49880578152991\&z=8\&mid=1u7LtL8loC1l9G\_hjkrJzK\_pYmiVsOHsb$ 



# ICD, Border gate pre-built warehouses/factories; Cold storage and factory







### **Cooperative's Infrastructure**

### Assets, facilities, and land of the cooperative

Indicators	N	%
Electric pumping station	28	37.3
Separate headquarter	14	18.7
Water pumps	13	17.3
Combine harvester	13	17.3
Seeding machine/transplanting		
machine	10	13.3
Drying oven	9	12.0
Computer	7	9.3
Cultivator/plough	6	0.8
Common land	6	8.0
Straw rolling machine	2	2.7

# ON THOSE CANADA

### Service activities of cooperatives

Services	N	%
Water pumping service	28	37.3
Plowing and tilling services	6	8.0
Rice transplanting/sowing service	10	13.3
Rice harvesting service	13	17.3
Rice drying service	9	12.0
Rice purchasing service	8	10.7
rice milling service	5	6.7
Fertilizers and pesticides trading services	21	28.0
Produce and sell rice seeds	15	20.0
Collaborating with input material supply enterprises	14	18.7
Collaborating to consume rice for farmers	20	26.7
Collaborating with the combine harvester owner	17	22.7
Connecting to plow/tiller owners	13	17.3
Doing internal credit	3	4.0



### Service activities of cooperatives (Cont.)

#### Statistics of training sessions, linkages and contracts of cooperatives/farming clusters

Indicators	Cooperatives	Farming clusters
	(n = 8)	(n = 7)
Input supply contracts (Number of contracts):	6	2
- Shrimp seed	6	2
- Shrimp feed/drugs	4	2
Consume sale contracts	2	0
Tachnical training courses (times/year)	5 - 20	1-5
Rotation loans/credit acess (\$US/member/time)	217 - 435	130 - 217
Priority to pilot aquaculture certifications (e.g.	4	1
VietGAP, ASC, BMP)		
Others	2	-

Note:  $\$US\ I = VND\ 23,000\ (2023)$ ; n denotes for number of surveyed cooperatives/farming clusters





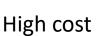
# Characteristics of human resources of the cooperatives

Indicators	Mean	Max	Min	STDEV
Number of Administrative Council (people)	4.3	15	3	2.2
Number of Board of Directors (people)	2.7	5	1	0.9
Chairman of the Board of Director are Director of the Cooperative (%)	75	-	-	-
Salary for board of director (%)	32	-	-	

Indicators	Education (year of schooling)	Age	Experience (year)
Chairman of Administrative Council	11.6	50.8	4.4
Director of and cooperative	11.1	51.2	4.3
Chair of the supervisory Board	9.8	53	4.3
Accountant	13.1	40.9	3.8
Treasurer	10.2	43.2	4.3

## 5. Challenges of cooperative's logistics







High loss



Small-scale



Weak transportation/infrastructure



Lack of preservation, cold storage



Lack of professional human resource

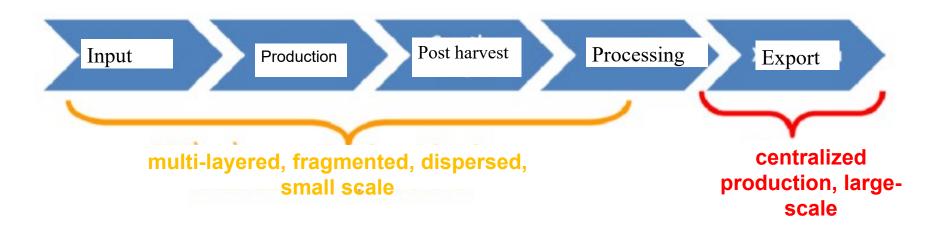


Complicated procedures



#### 6. Requirements of Vietnamese Cooperatives' logistics

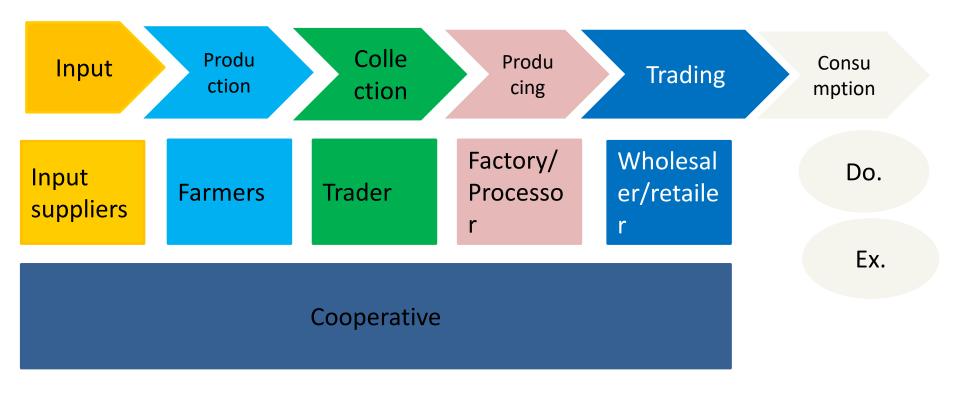
Limitations of the current agricultural value chain?



- To increase added value → Cooperatives must engage in most nodes of the value chain?
- To overcome challenges in agriculture.



#### **Roles of Cooperatives in the value chain?**













# COOPERATIVES









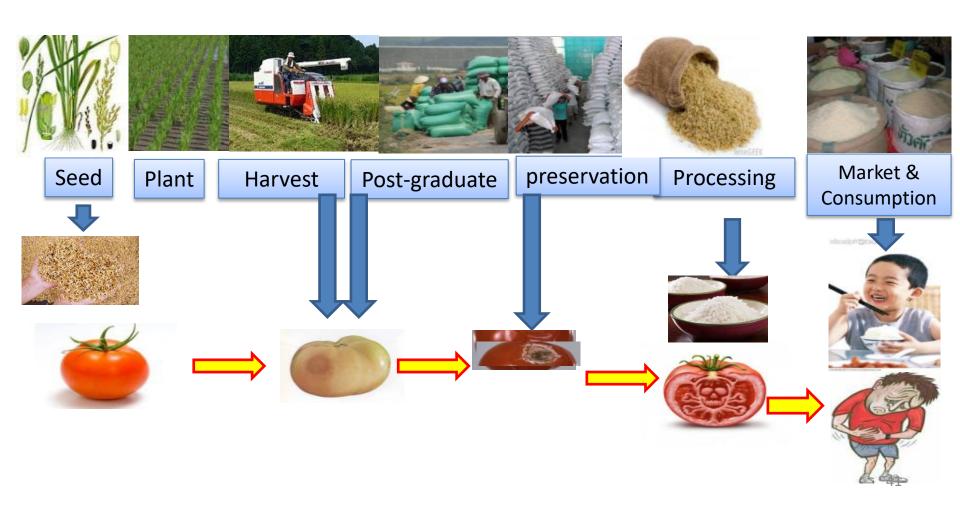








1. High quality production: Production along the value chain - applying science and technology at all stages:





2. Food safety: VietGAP, ASC, organic agriculture

VN: Pesticide: 70,000 – 116,000 t/year ≈ 1.29kg/capital



Production along the value chain - ensuring quality, food safety - enhancing value



3. Solution for large quantities: Production by cooperatives, farming clusters, large fields

Production under cooperatives will solve the problem of providing goods in large quantities, synchronously, of the same quality - enhancing value





#### 4. Solution for competition: Brand building!



Pumping impurities into pigs



Pumping impurities into shrimp

Pumping impurities into poultry





#### 5. Low cost — Reducing loss







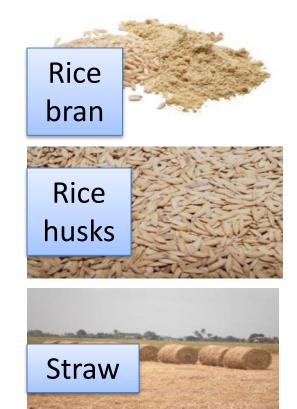
#### 5. Low cost — Mechanization and automation







#### 5. Low cost — Processing to take advantage

















#### 5. Low cost — Processing for added value improvement



























# 8. Take-home messages

Developing infrastructure Developing information technology **Developing strategies for using logistic services Human resource development** Collaboration – inter-regional, companies, NGOs, etc. Improving policies/regulations



# 8. Take-home messages

- Crucial roles of agriculture and cooperative
- Transition from supply chain to value chain and new-style rural communes

- 3 Logistics system of cooperatives are very weak
  - Five benefits of strong cooperatives and Six solutions for enhancing logistic system

# Thanks for Listening

