GREEN ENTREPRENEURSHIP AND INNOVATION IN THE MEKONG DELTA, VIETNAM

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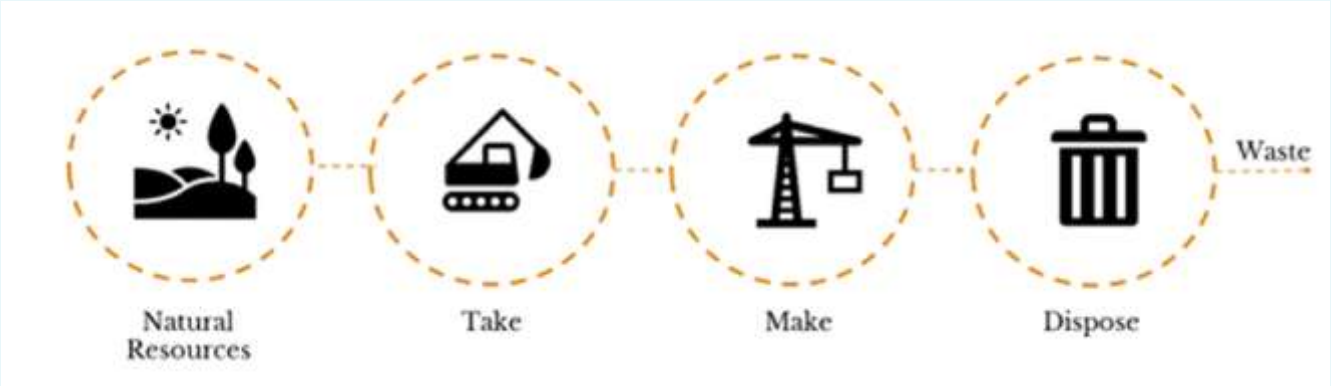
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- Concept of innovation
- Some examples in the Mekong Delta
- Drivers of transformation
- Green transition in agriculture framework
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Why green entrepreneurship?

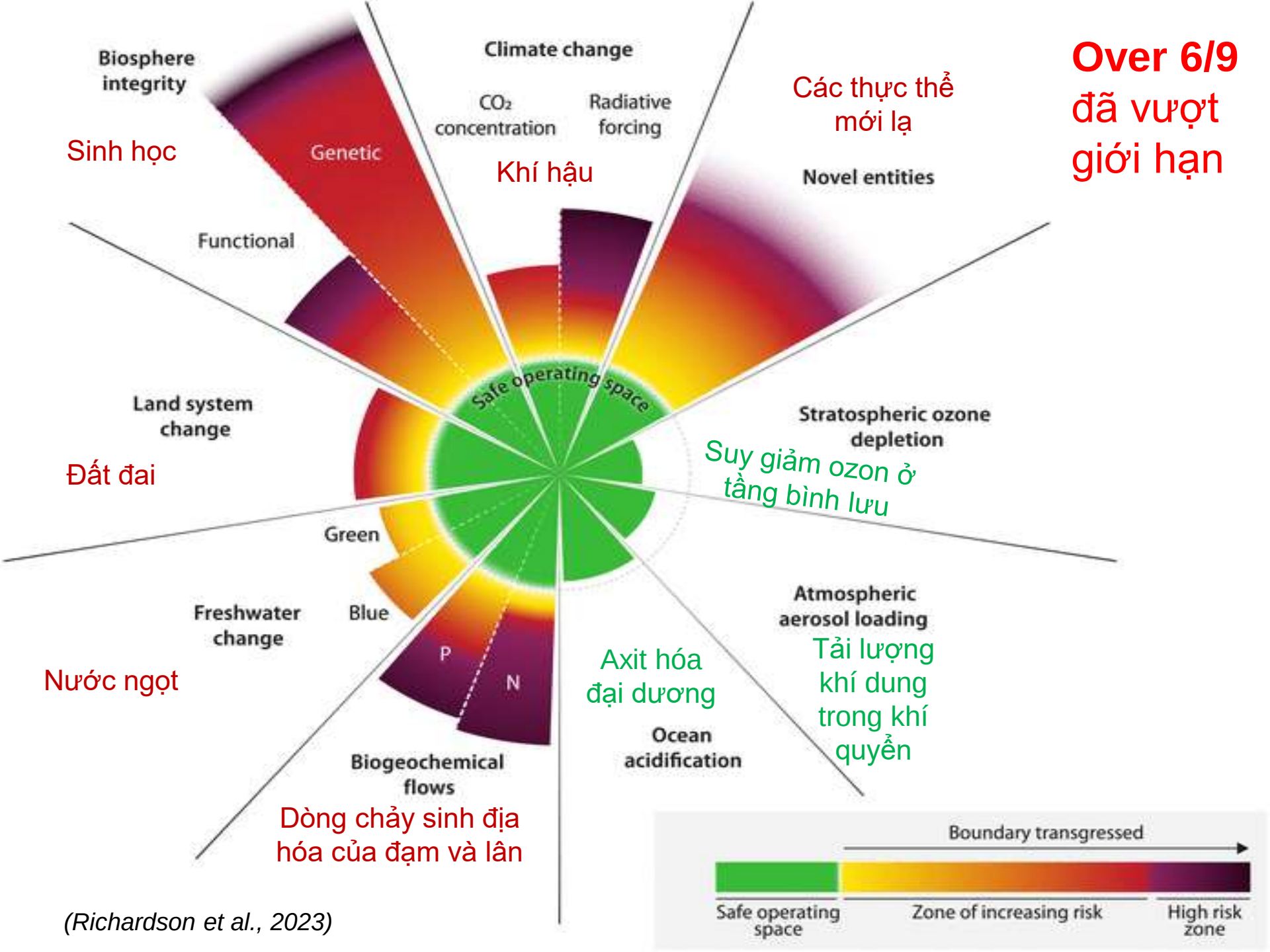
Linear economy



- Natural degradation
- Loss biodiversity
- Pollution
- Wealth inequality
- Climate change
- Social change
- Unstainable



Brown economy



(Richardson et al., 2023)

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Why green entrepreneurship?

Brown economy (linear)

June 2012 — Rio de Janeiro

Green economy (circular)





Green economy is defined as low carbon, resource efficient and socially inclusive.

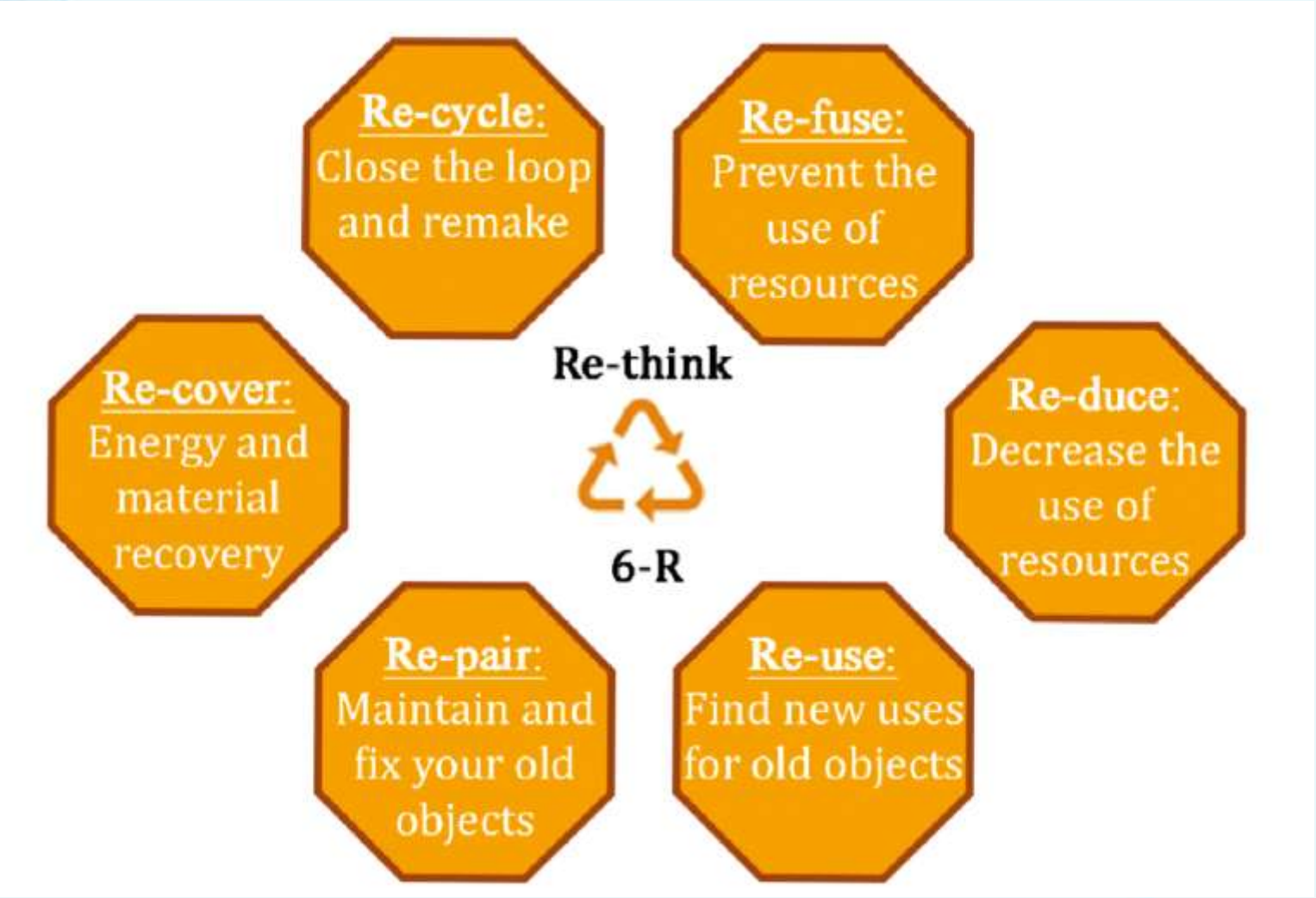
Circular economy stands against the linear economic model, to be referred to as the 3Rs: **reuse, recycle and reduce** existing (used) materials and products (Van Berkum et al., 2019)

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3R-strategy



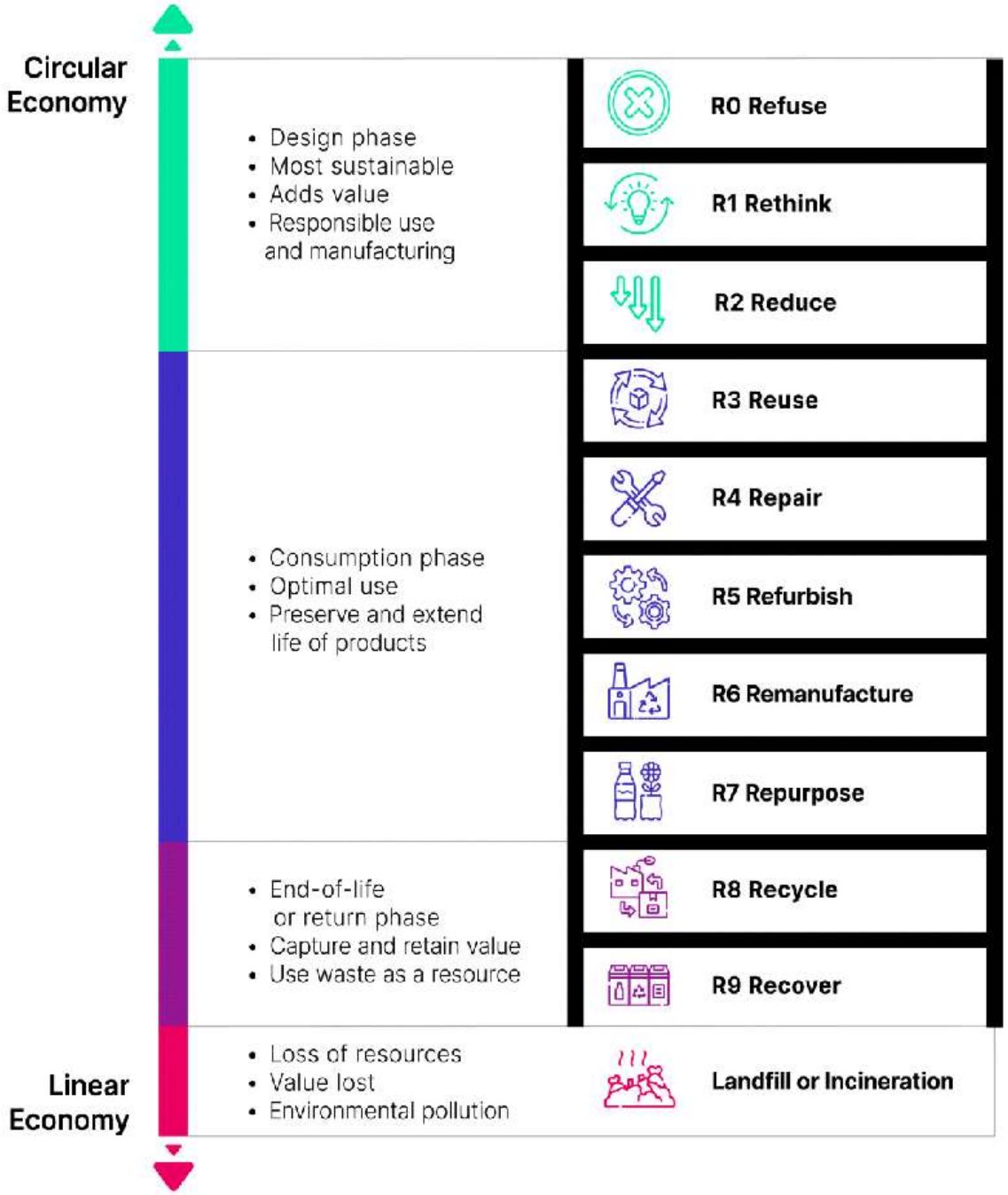
6R-strategy



(Agrodite, 2020)

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How many R?

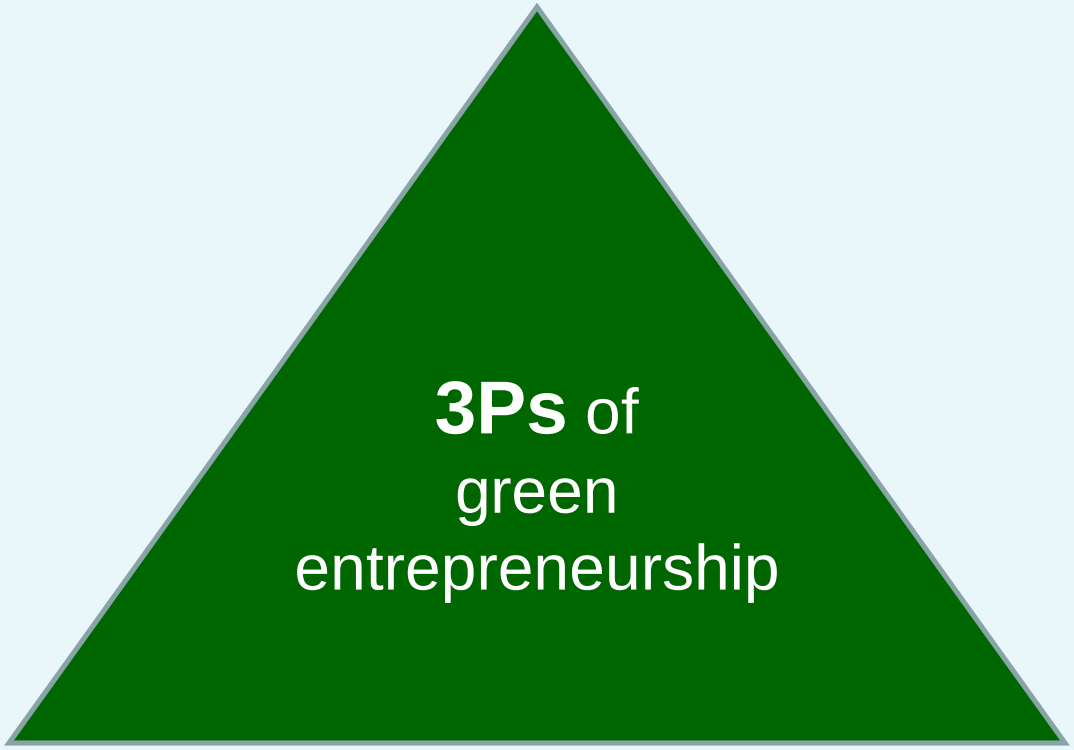


CIRCULARISE

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Green entrepreneurship

People



Planet

Profit

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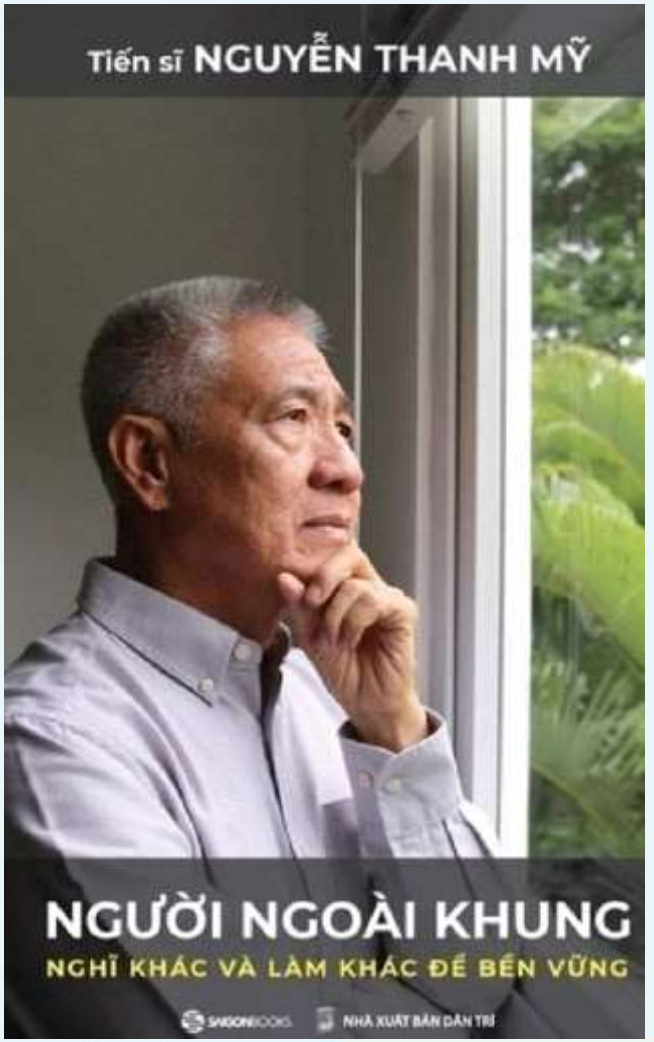
Concept of innovation

- **What is innovation?**
  - ✓ New *technologies*
  - ✓ *New ideas*
  - ✓ New *approaches*
  - ✓ *Improving* current activities

  To solve identified problems

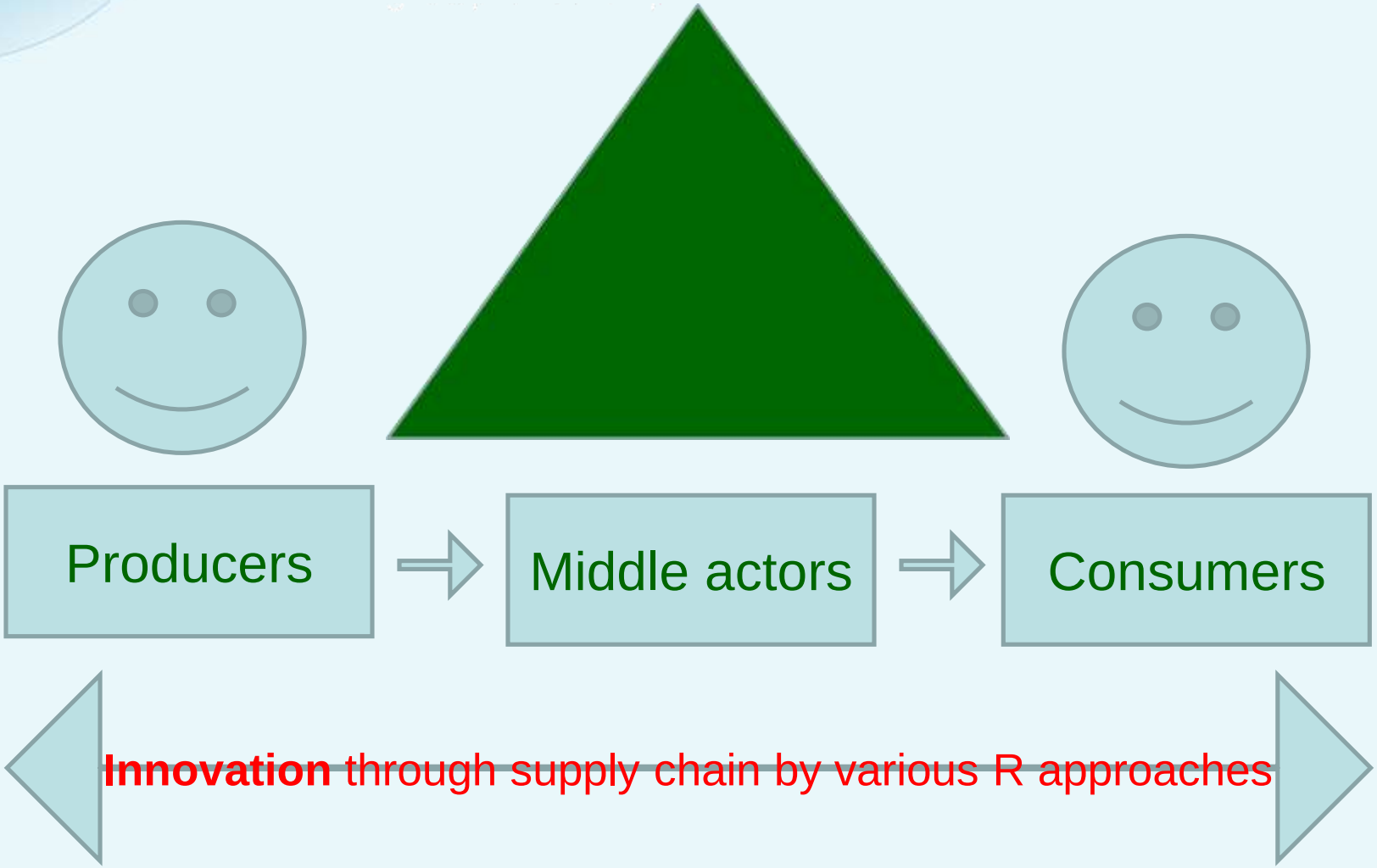






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Innovation in green entrepreneurship



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Examples in the Mekong Delta



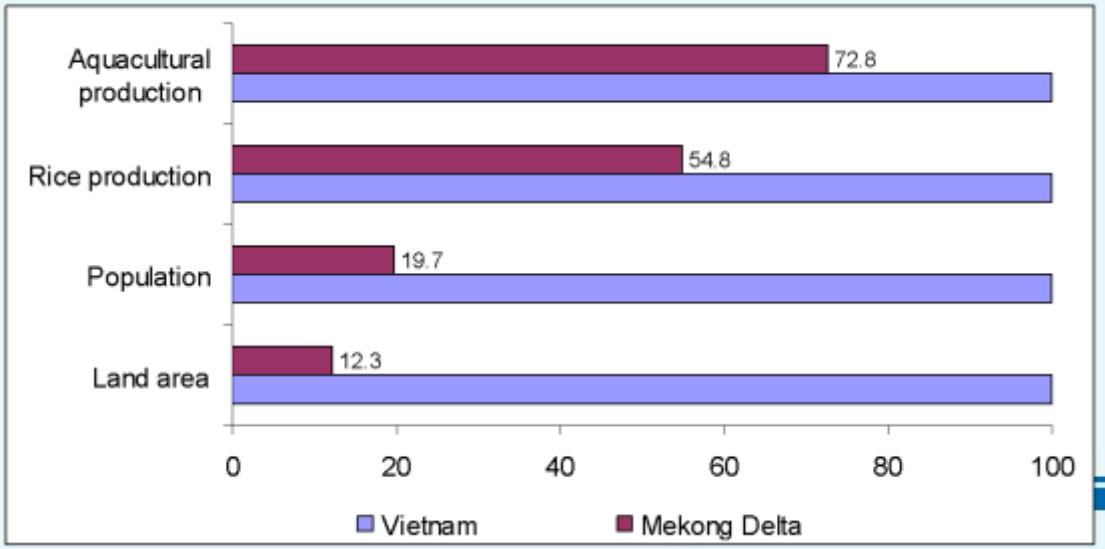


Population: 17.5 million

- ✓ ***Rural 72%***
- ✓ Urban 28%

Land area: 40,922 km^2

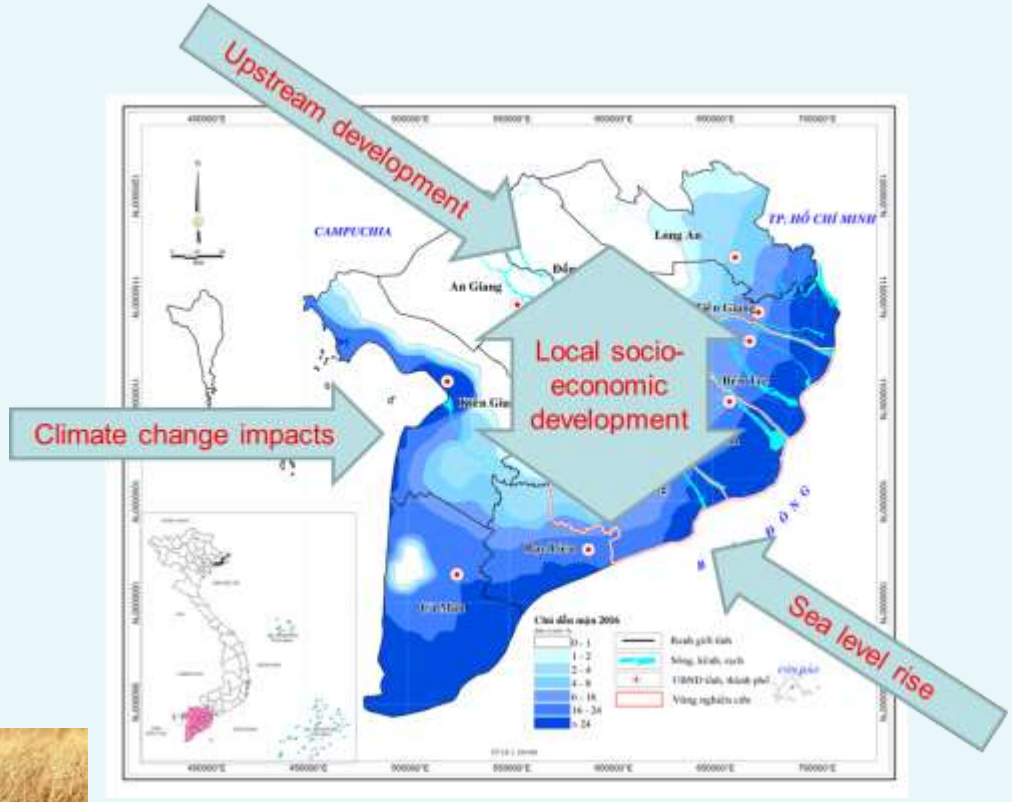
- ✓ ***Agriculture 63%***
- ✓ Others 37%



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Examples in the Mekong Delta

- Mekong Delta ⇔ Agricultural and aquaculture development
- High risk and uncertainty (interaction upper and coastal area)
- What innovations?







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Policy innovation

Nature-based solutions

THE GOVERNMENT

THE SOCIALIST REPUBLIC OF VIETNAM
Independence - Freedom - Happiness

No. 120/NQ-CP

Hanoi, November 17, 2017

RESOLUTION

ON SUSTAINABLE AND CLIMATE-RESILIENT DEVELOPMENT OF THE MEKONG DELTA

GOVERNMENT

2. Viewpoints

a) Facilitate sustainable and prosperous development by adapting, promoting strength and potential, turning challenges into opportunities to serve development, thereby ensuring prosperity for local people as well as preserving traditional and special cultural values of the Mekong Delta and paying attention to land, water protection, and especially local people.

b) Shift the way of thinking in agricultural development from mainly rice cultivation to agricultural economics, from quantity to quality and from chemical-based agricultural production to organic and hi-tech practice associated with value chain and trademark development, pay attention to development of processing and supporting industries in association with agricultural economics. The agricultural products not only play an important role in food security assurance but also bring nutritional value to serve disease prevention and treatment, thereby creating famous trademarks.

c) Respect natural laws and avoid violent interference with nature; select development models adaptive to natural conditions and friendly to the environment and develop sustainably with the motto "living with floods, brackish water and saltwater"; make plans and take measures for response to natural disasters such as storms, floods, droughts and saltwater intrusion and to the most unfavorable situation due to climate change and development of Mekong River

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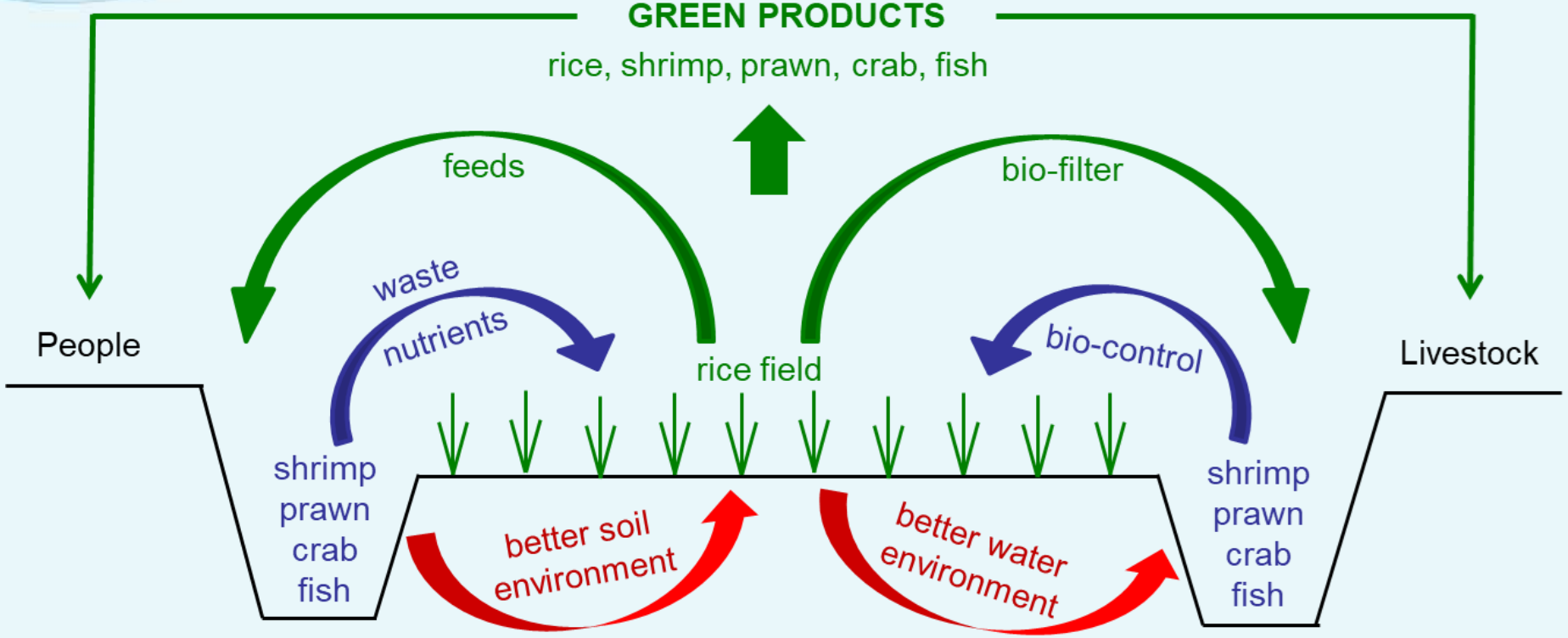
Examples in the Mekong Delta (Rice – shrimp)





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Examples in the Mekong Delta (Rice – shrimp)



(Binh et al., 2022)

Examples in the Mekong Delta (Rice – shrimp)

Items		Monoculture (2 rice crops)	Polyculture (rice-shrimp)
Productivity (kg/ha/year)	Rice	10,770	4600
	Shrimp (tiger and white-leg)	0	330
	Giant freshwater prawn	0	150
	Mud crab	0	50
	Natural shrimp and fish	0	20
Costs, revenues and profits (million VND/ha/year)	Total operational costs	40.0	23.6
	Total revenues	70.0	96.5
	Total profits	30.0	72.9
	Total profits/total costs (%)	75	309

(Binh et al., 2023)

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What is this?



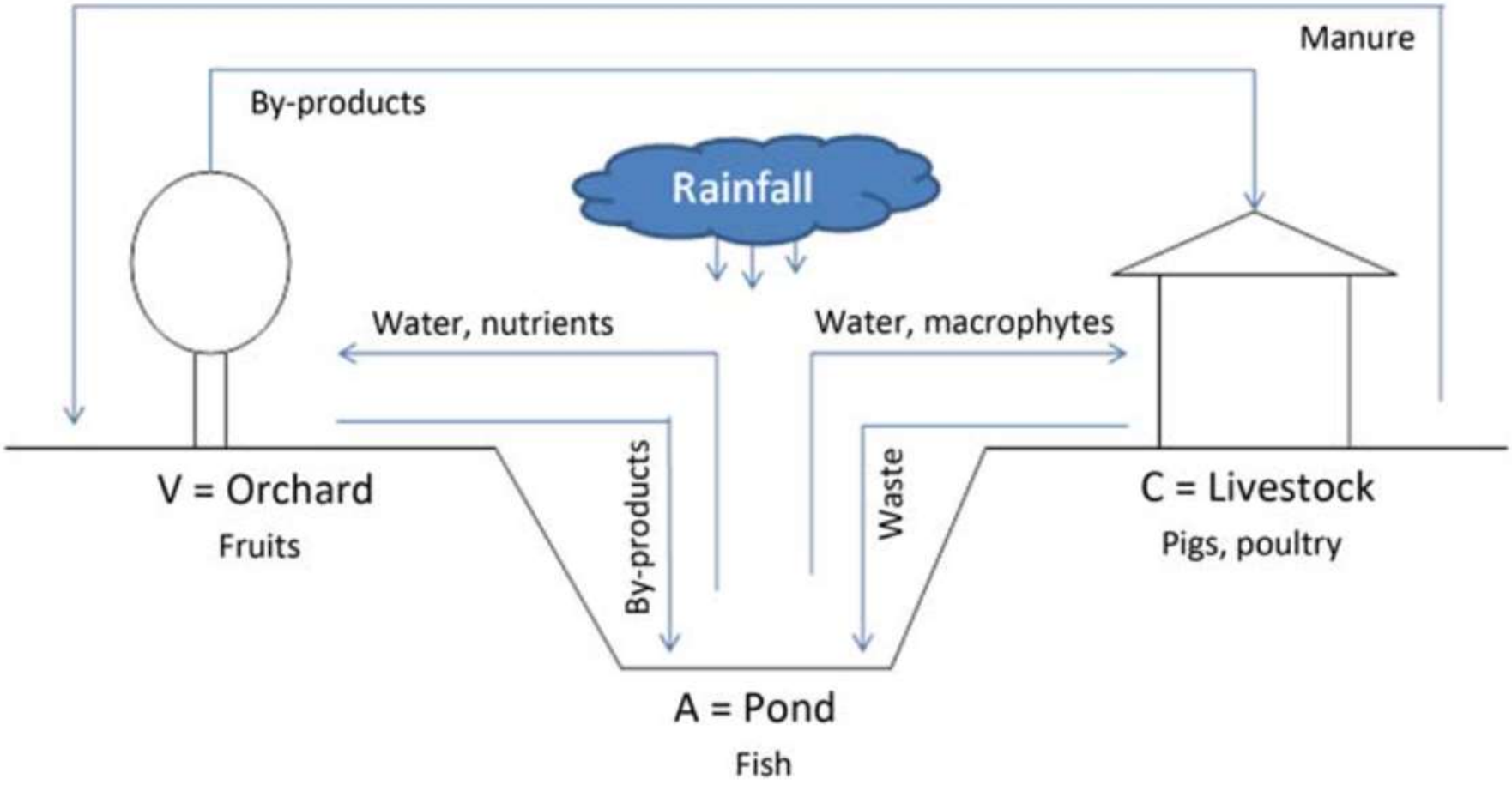
https://vnexpress.net/tin-tuc/thoi-su/ong-nong-dan-m 140% Search

Thứ tư, 6/6/2018, 03:12 (GMT+7)

Ông nông dân 'may áo' cho xoài tứ quý

Nhờ "mặc áo" nhiều màu sắc cho trái xoài, ông nông dân tại Bến Tre đã thu lợi nửa tỷ mỗi năm và được nhận giải thưởng sáng tạo.

Examples in the Mekong Delta (VAC integrated farming system)



(Binh et al., 2024)

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Examples in the Mekong Delta (VAC integrated farming system)





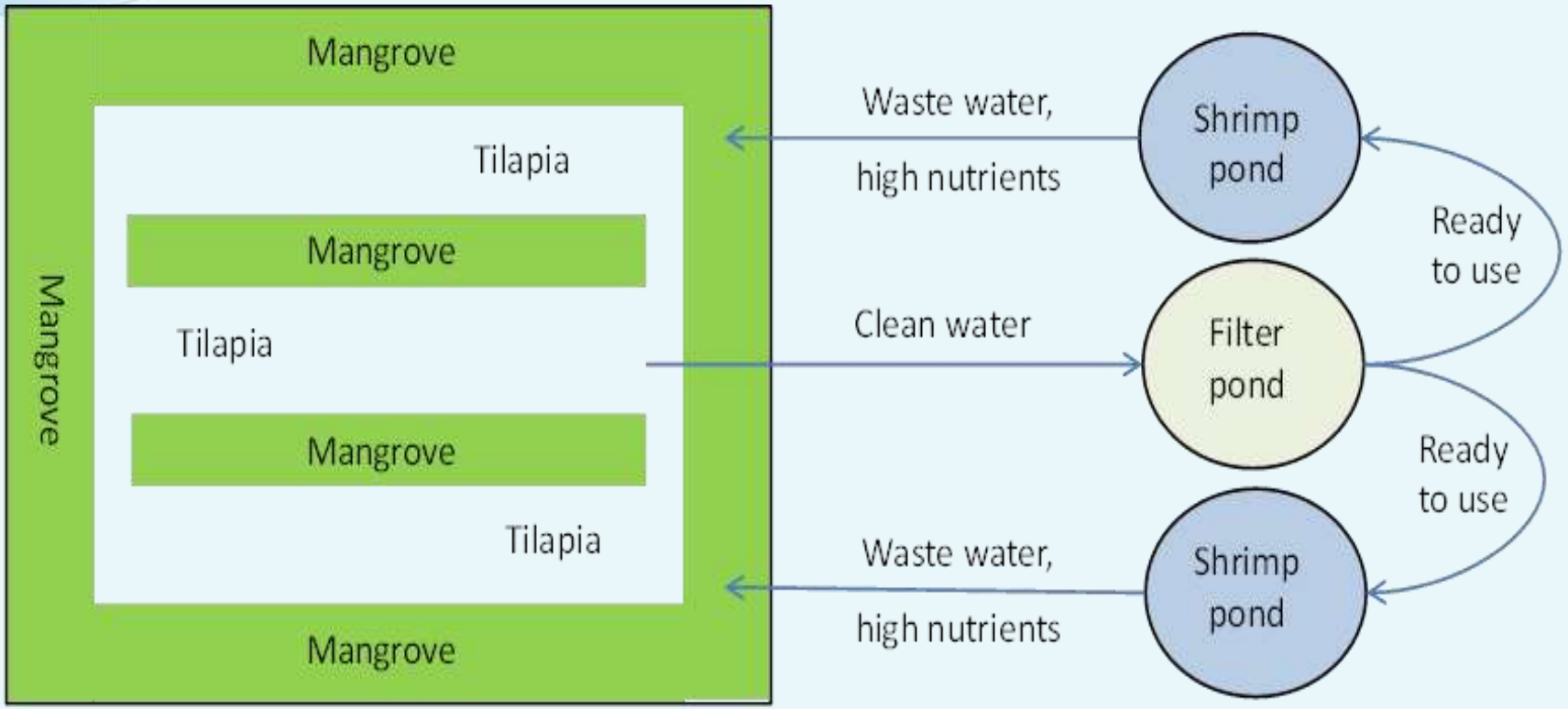






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Examples in the Mekong Delta (Mangrove – shrimp)



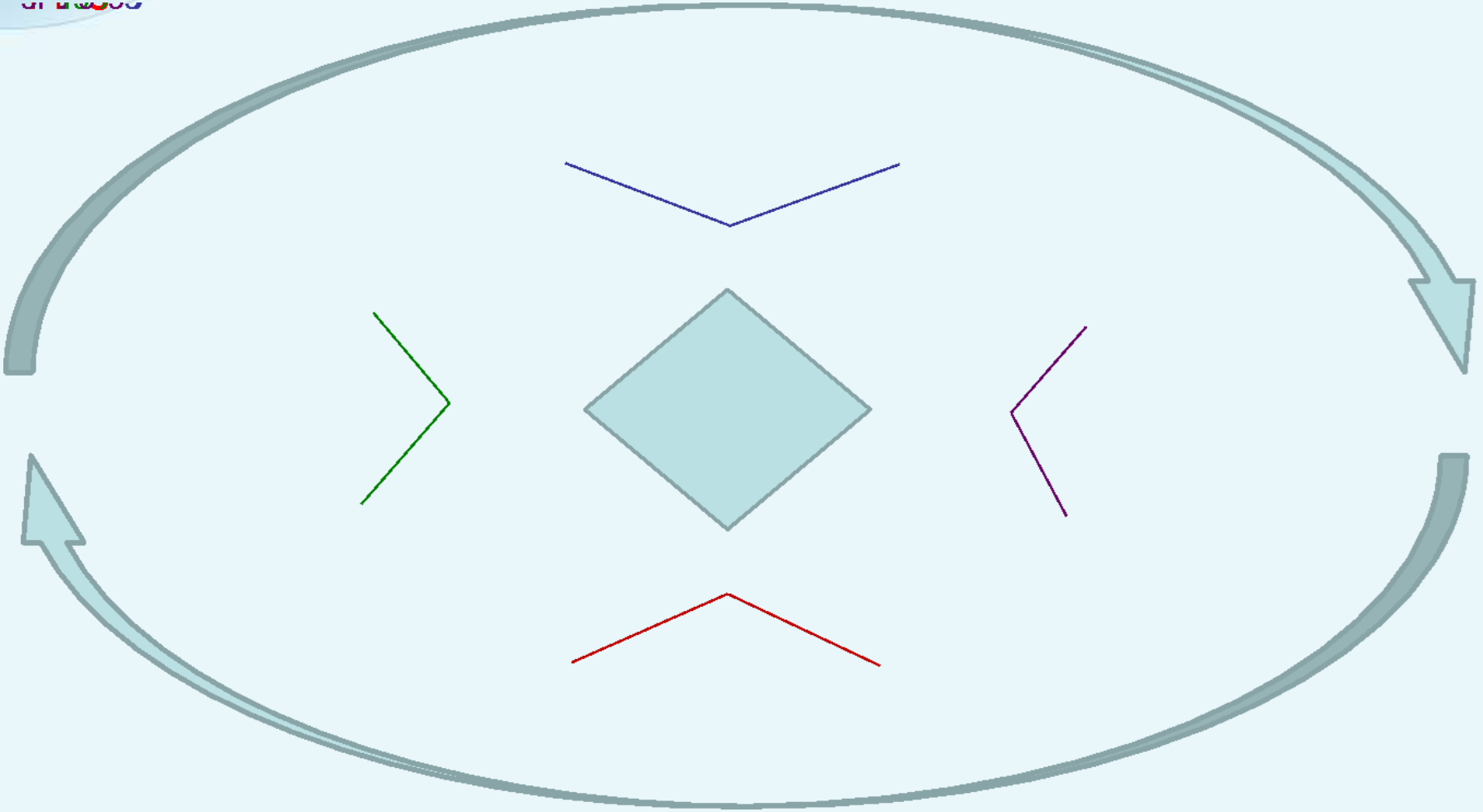
Nature based water treatment system

Intensive shrimp production system

(Binh et al., 2024)

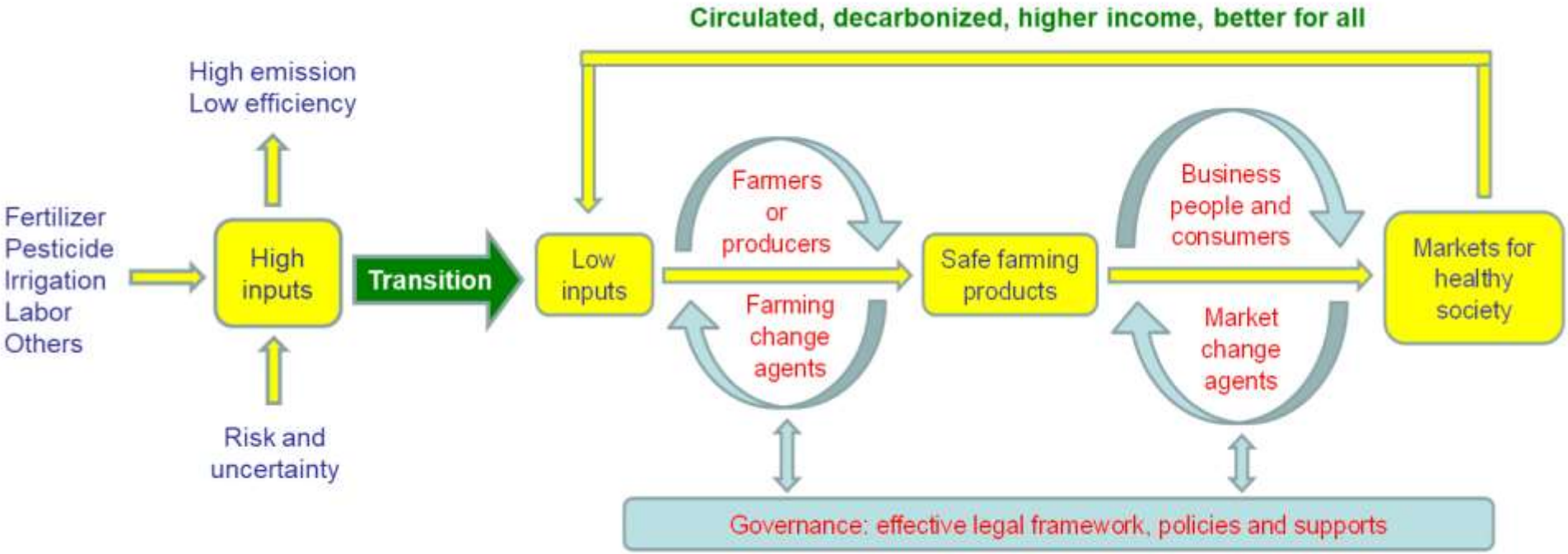
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Drivers of transformation



(Binh et al., 2021)

Green Transition in Agriculture (Green-TIA) framework



Local system	Resources use Livelihood resilience Socio-economic growth	**Think Globally Act Locally**	COP 26-27-28 Mitigation & adaptation Sustainable development	**Global agenda**

(Binh et al., 2023)

Conclusion

- Green entrepreneurship and innovation have been introduced from policy to practice
- Many pros and cons
- Integrated framework should be applied to achieve 3P pillars (People-Planet-Profit)

Thank you!

Q&A