



Linking Asia's farmers to the global economy

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Overview

What makes smallholders competitive?

Cases from Southeast Asia

Challenges for smallholders

Implications for R&D



...but first

“Agrifood value chains have become the dominant force in the global food system, and one that presents both potential opportunities and threats for the poor.

The question is not whether to participate but how to do so in way that best improves well being”.

“The major threat is that the poor will be bypassed, or even harmed, by the development of these chains.

At the same time, their involvement might offer real opportunities for sustainable livelihood improvement” (Tuan and Cuna, 2005)



What makes smallholders competitive in global supply chains?

- Specialised skills
- Value-adding at source
- Specific markets
- Competitive cost structures





Six cases - smallholders linked to global markets

- Cocoa
- Cassava
- Seaweed
- Shrimp
- Cashew
- Fresh Vegetables





1. Cocoa in Sulawesi

- >500,000 growers on small farms (0.5-3.0 ha) with diversified incomes
- Low inputs and low yields
- ~80% of world price at farm gate
- Prices up 2X since 2006 with rising demand





1. Cocoa in Sulawesi

Ad-hoc industry development

Most value in the chain is at the farm

Key issues in transformation:

- R&D: disease, pests, fertility
- Value chain: product quality, farm practices and chain efficiency between farmers and port





2. Cassava in Vietnam

- From backyard to commercial crop in 25 years
- 60% new varieties
- >2 million smallholders
- Small farms (~ 0.3 ha)
- Good entry point for poorer farmers



2. Cassava in Vietnam

- Since 2000 production up 4X to 8.9m tonnes
- 1999- 2003, benefit to farmers US\$52m
- 1993: no starch factories;
2009: 60 starch factories



2. Cassava in Vietnam

Ad hoc chain development - many players, high transaction costs, high risks and low profit margins

Key issues in transformation:

- R&D: environmental hazards
- Value chain: new demand for higher quality products (biofuel, bioplastics), improved chain efficiency





3. Seaweed in Indonesia

- World's leading producer of *cottonii* seaweed
- 2.1m tonnes fresh in 2007.
- Up 2X from 2000
- ~200,000 small scale producers
- Good entry point for poorer coastal people





3. Seaweed in Indonesia

Shipping low-value / kg product large distances with most value in the chain in Java or China

Key issues in transformation:

- R&D: genetics, agronomy
- Value chain: overcoming price volatility, value adding at source



4. Shrimp in Indonesia

- >400,000 ha
- >230,000 small producers.
- traditional farming, semi-intensive farming, and intensive farming
- >90% export production by <10% of farmers

Key issues in transformation:

- R&D: diseases, transformation
- Value Chain: policy support for smallholder intensification





5. Cashew in Indonesia

- ~500,000 smallholders
- Exports worth US\$50-70m
- Very low input, low returns
- Income security crop

Key issues in transformation:

- R&D: agronomy; genetics (long term)
- Value Chain: improved local processing; markets for larger kernels




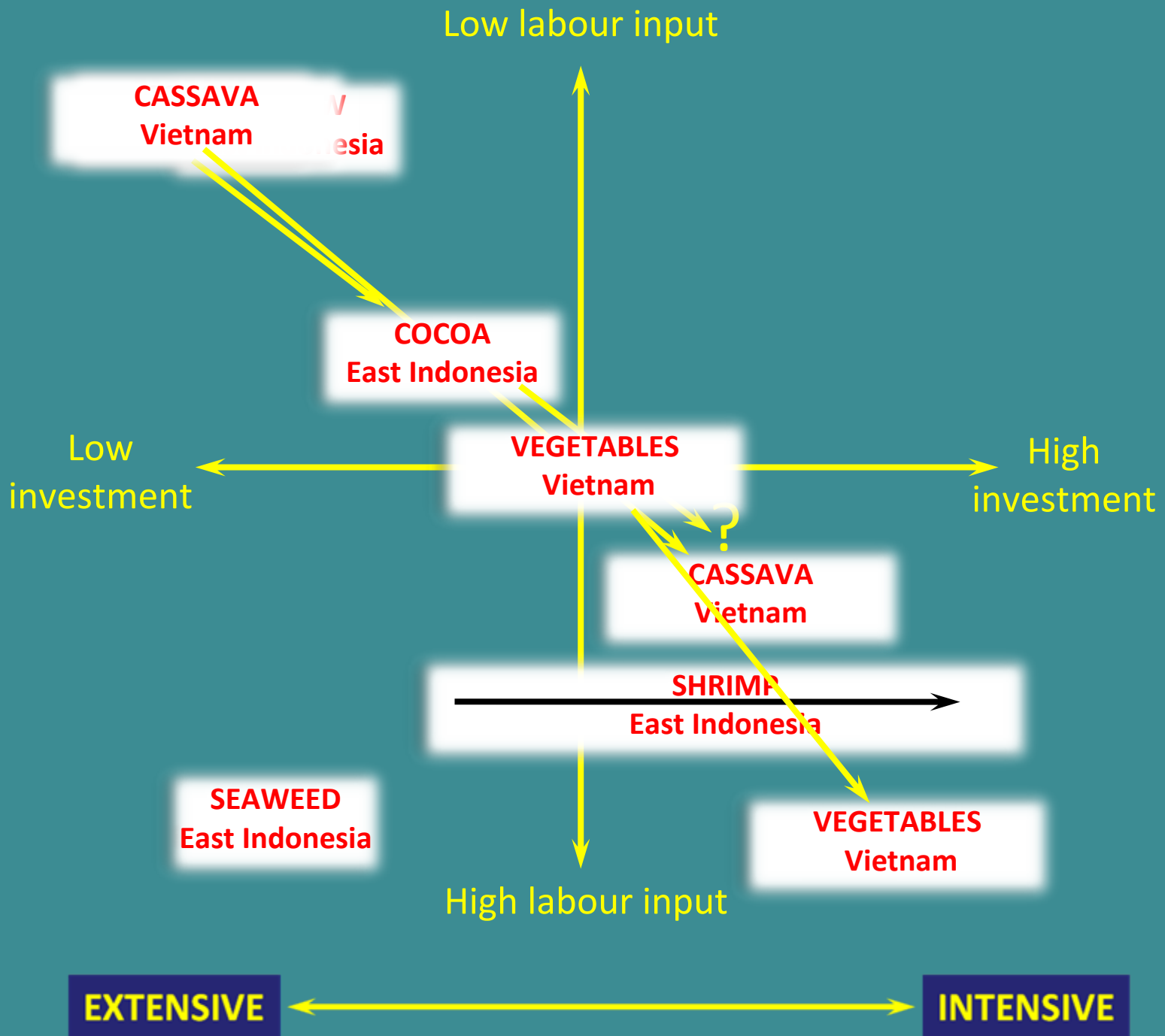


6. Vegetables into urban markets in Vietnam

- 1995: 10 supermarkets
- 2007: 160 supermarkets
- >95% of supplying farms small and fragmented (<0.5ha)

Key issues in transformation:

- R&D: postharvest processing
 - Value Chain: food safety, chain logistics and coordination, minimising transaction costs...
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Low labour input

CASHEW
East Indonesia

COCOA
East Indonesia

Low
investment

High
investment

CASSAVA
Vietnam

SHRIMP
East Indonesia

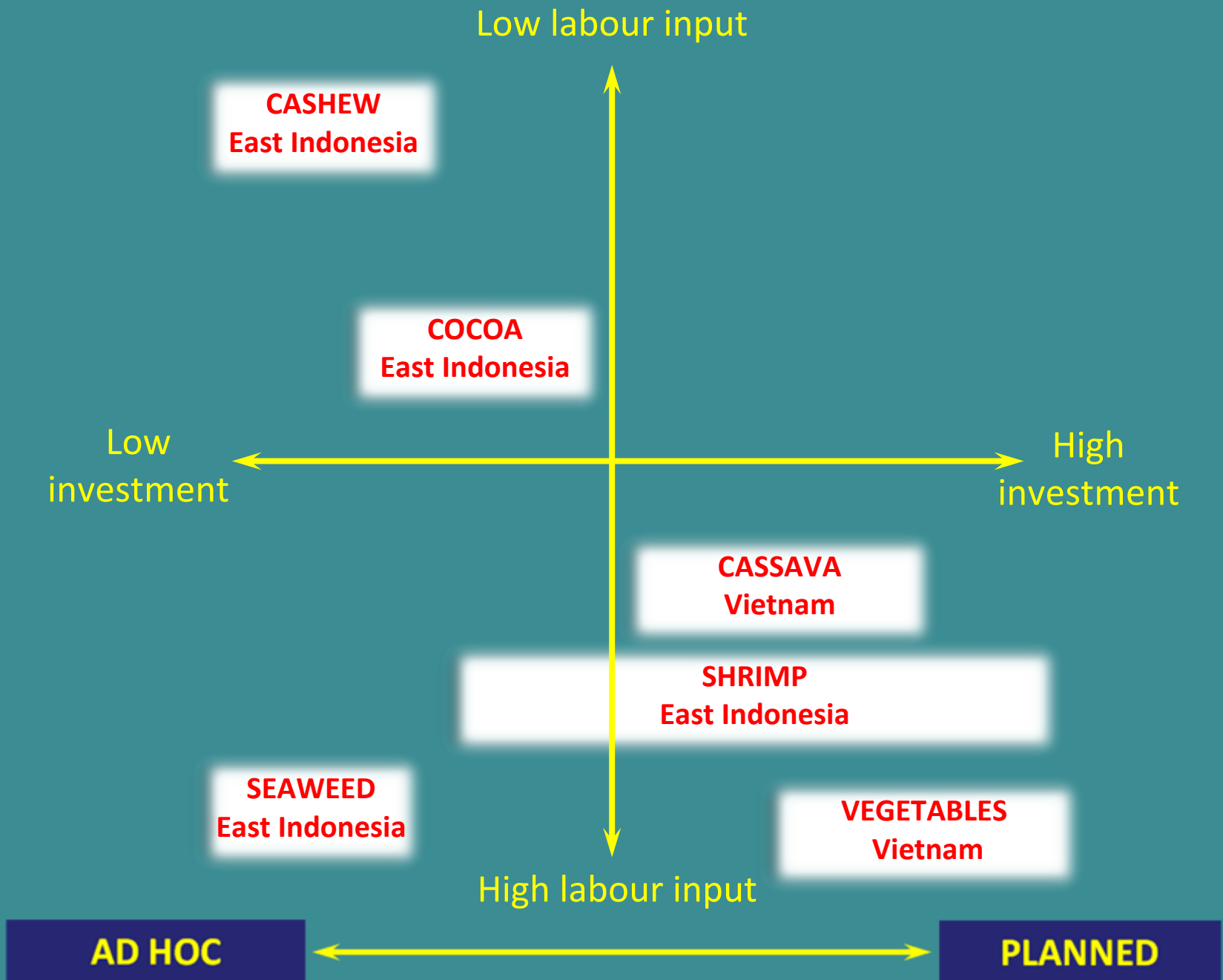
SEAWEED
East Indonesia

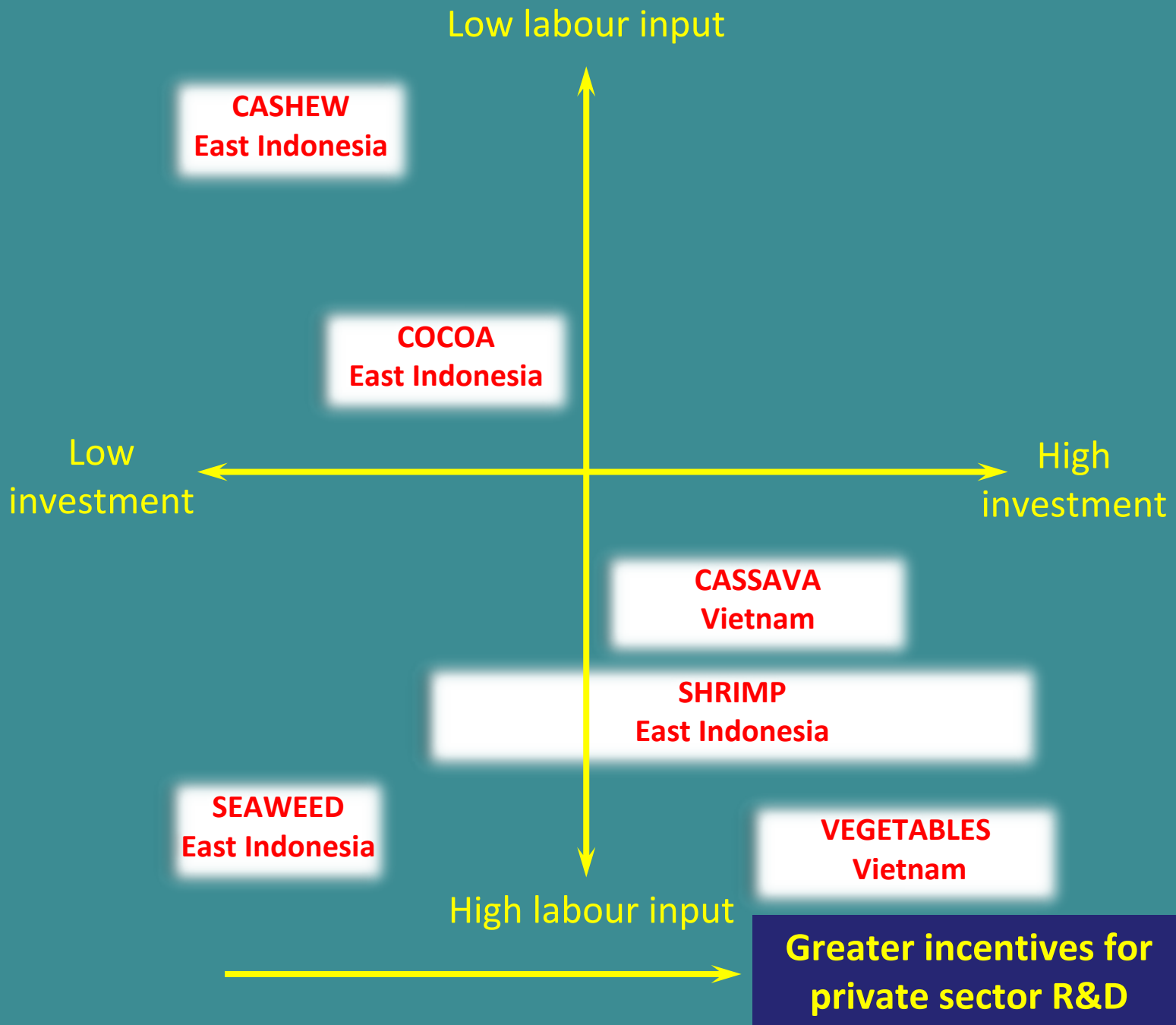
VEGETABLES
Vietnam

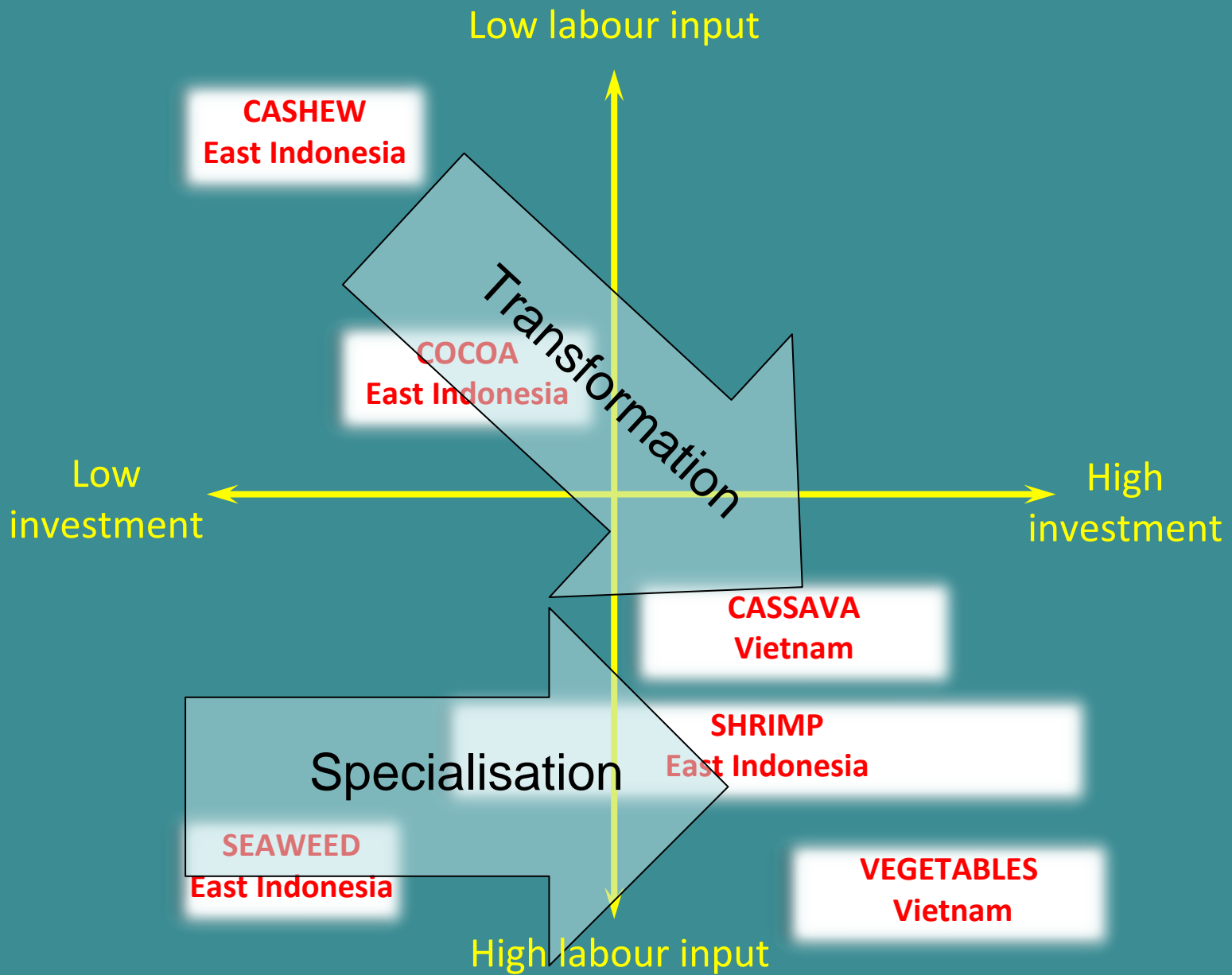
High labour input

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Transition to stronger alignment with global markets

Risks in transition

- Production enterprise risks
- Value chain risks
- Specialisation risks
- Resolving production and value chain risks may not be sufficient for small scale producers to easily make a transition



Cocoa in Sulawesi

Despite

- Sustained high prices and demand
 - Simple technologies for doubling productivity and increasing quality
 - >100,000 farmers 'trained'
- ...uptake is very low

Farmers judgements of risk associated with transition



Cattle in East Java

Very high rural population densities

~25% of Indonesian herd in province
(3 million head)

highly specialised small-scale landless
producers

Liveweight prices up to 50% higher
than in Australia

Selling to local/regional markets





Cattle in Vietnam

Coffee prices collapsed in 1997

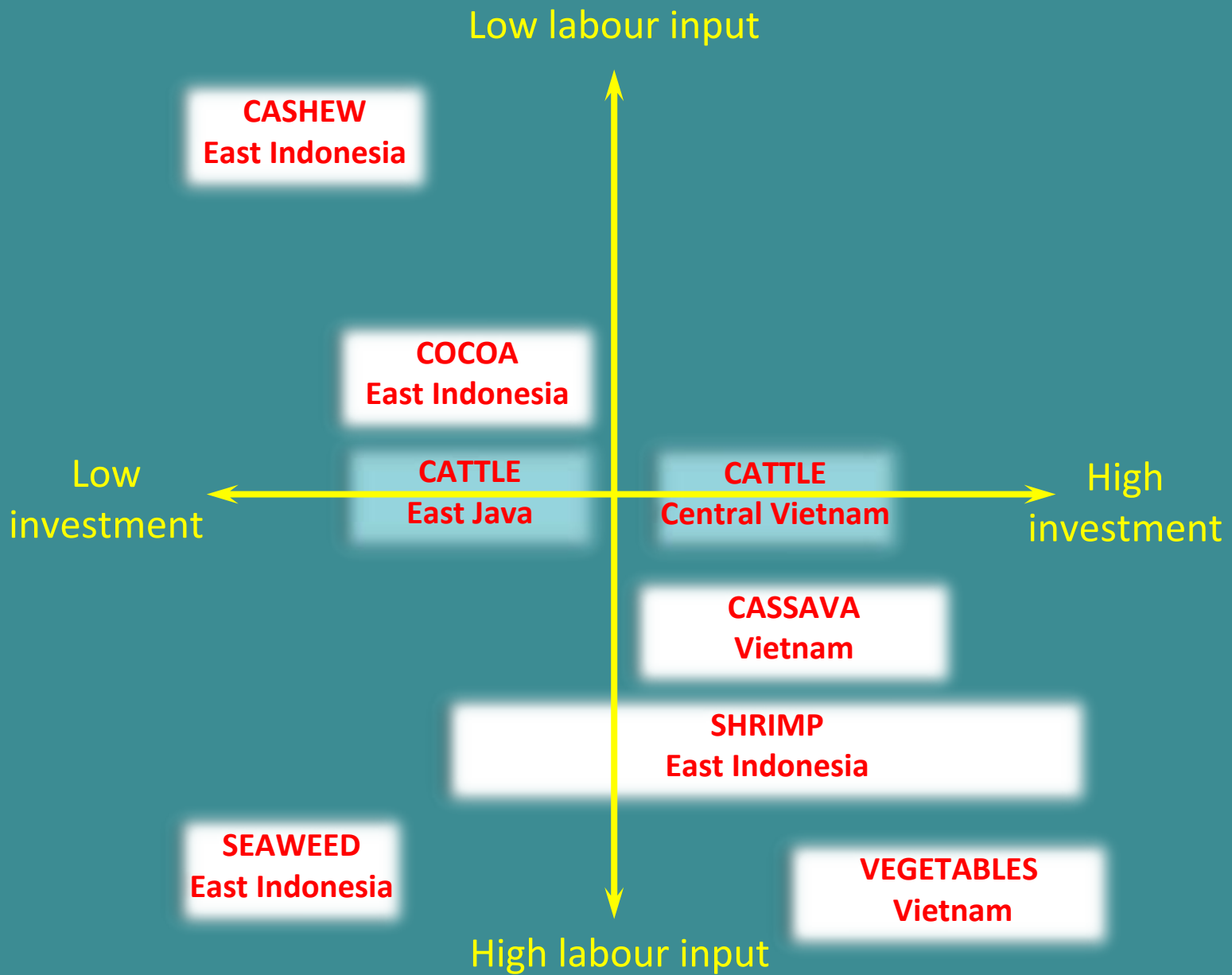
Farmers diversified to include cattle

In 7 years, >3000 small scale forage-cattle enterprises in Ea Kar district

Net returns of ~US\$500/yr compared with US\$91/yr from coffee

Selling to local/regional markets





Opportunities in local /regional markets

Implications for R&D...

Both Public and Private R&D and investment needed

Private: Structured supply chains, food safety, traceability, BDS, A2F and infrastructure

Public: Technical, risk management, diversification, BEE and infrastructure

Opportunity for research - development linkages (SADI, CAVAC and ASLP)

In conclusion...

Technical and value chain issues are often inter-linked...

...clear opportunities for joint public and private sector investment and R&D

Small scale producers need substantial technical, market & investment support to transition to global markets

Don't forget local / regional market opportunities