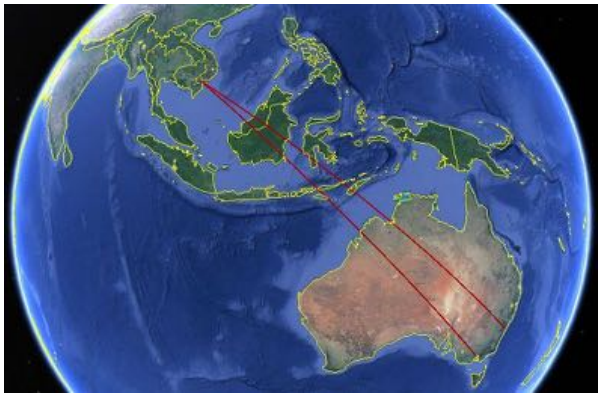
Rural research & development in Vietnam



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Country profile

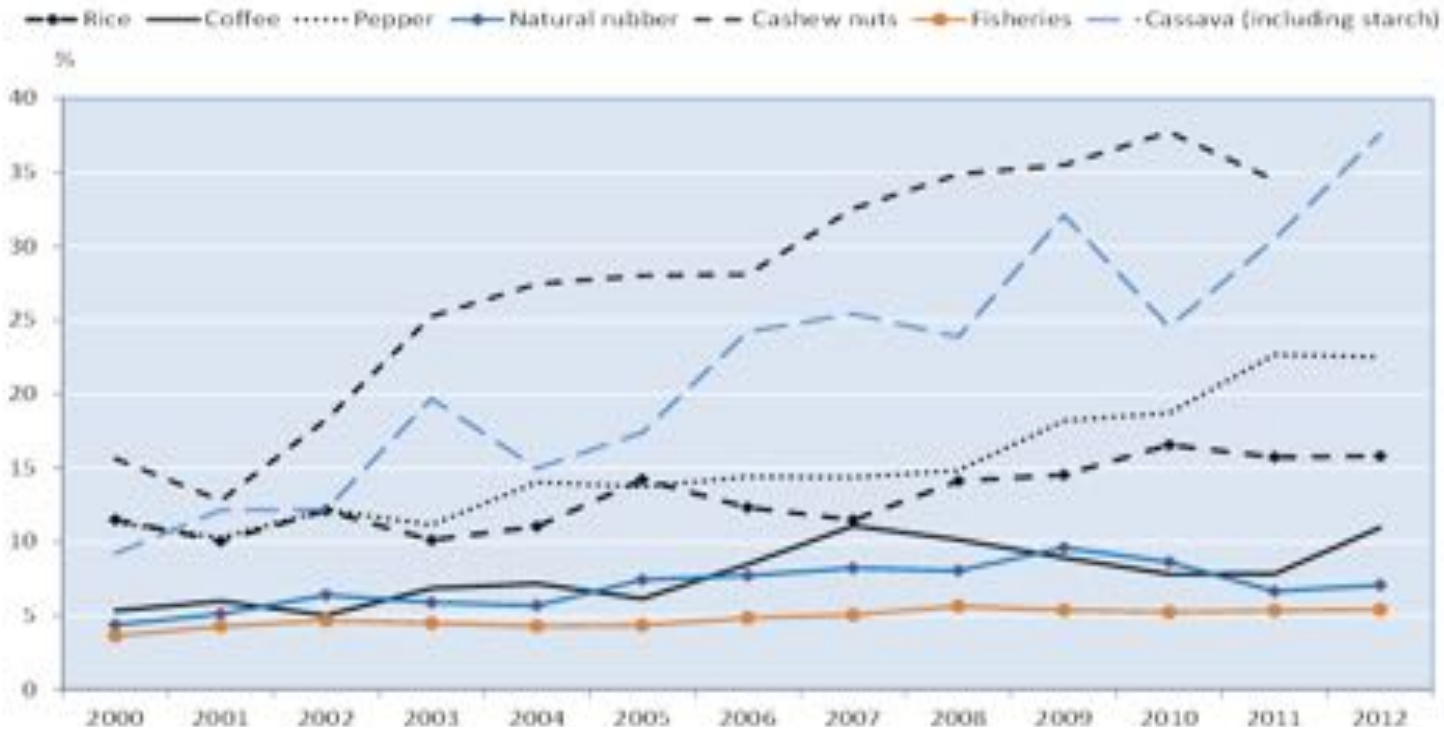
- population: 90.7 million, 69% rural
- life expectancy 73, 77 years (men, women)
- agricultural labour: 48%
- land area: 33 million hectares
  75% non-urban (ag/forest/fish)
  30% agricultural land
  12% rice paddy land
- GDP growth: 6%

* rice, coffee, pepper, rubber, cashew, fish, cassava

(IPSARD 2016)

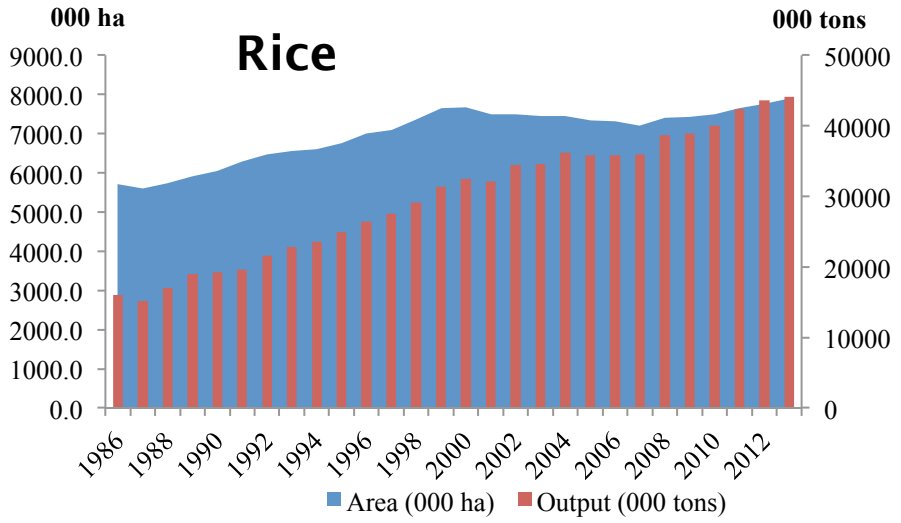
Good news for agriculture

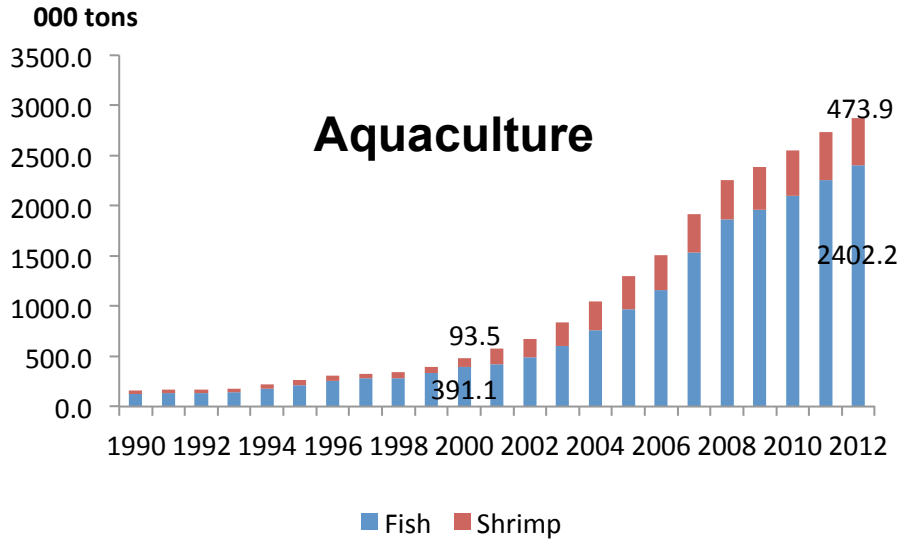
- over $1 billion in trade in rice, coffee, pepper, rubber, cashew, fish, cassava
- ranked in top 5 of global exporters in each sector

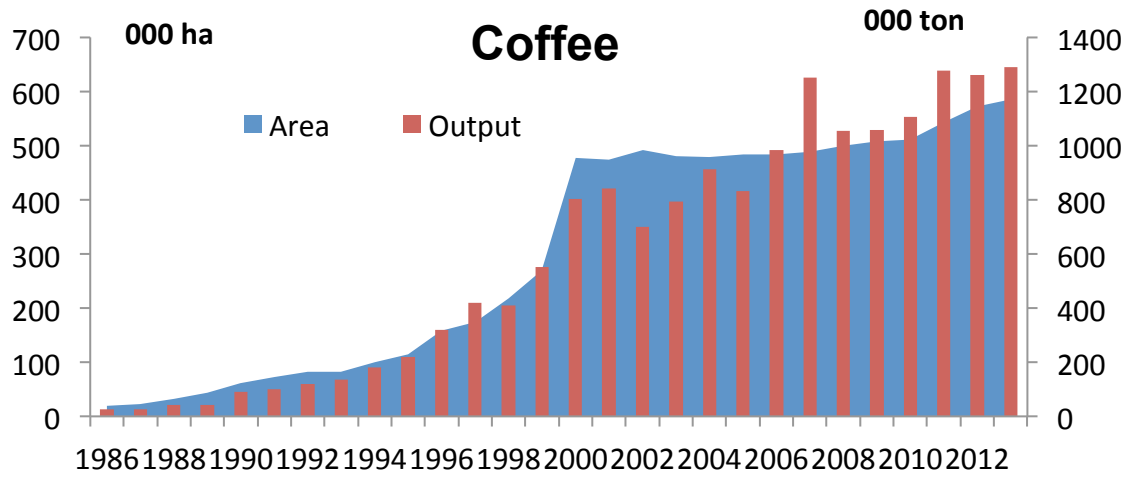


(IPSARD 2016)

Agricultural performance

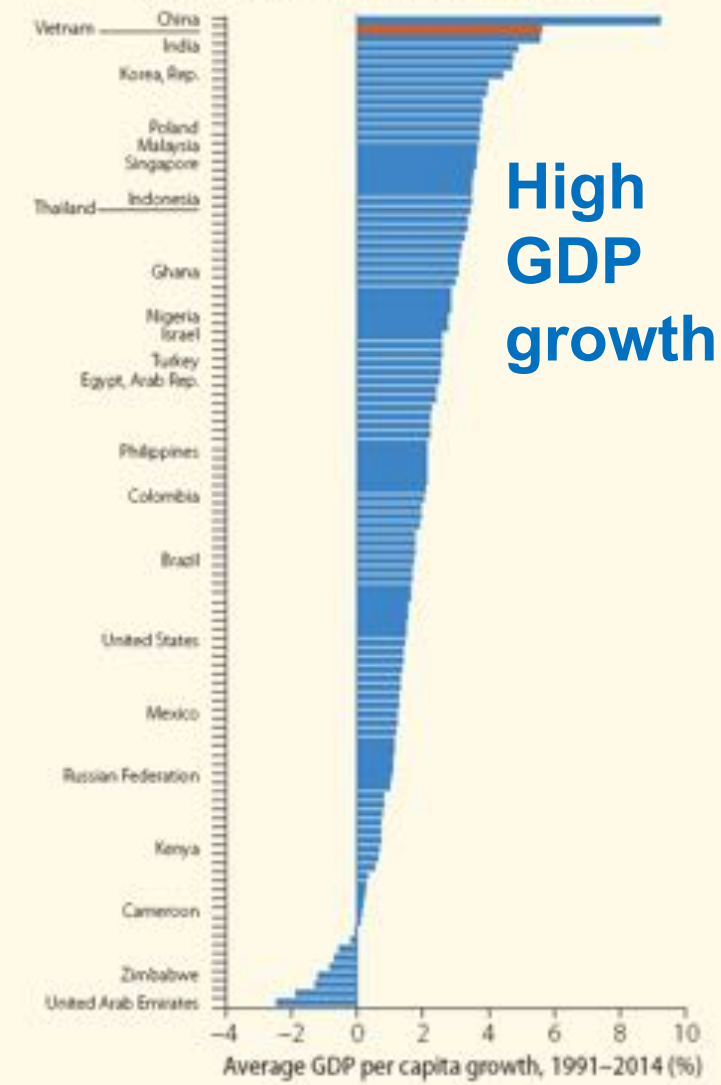




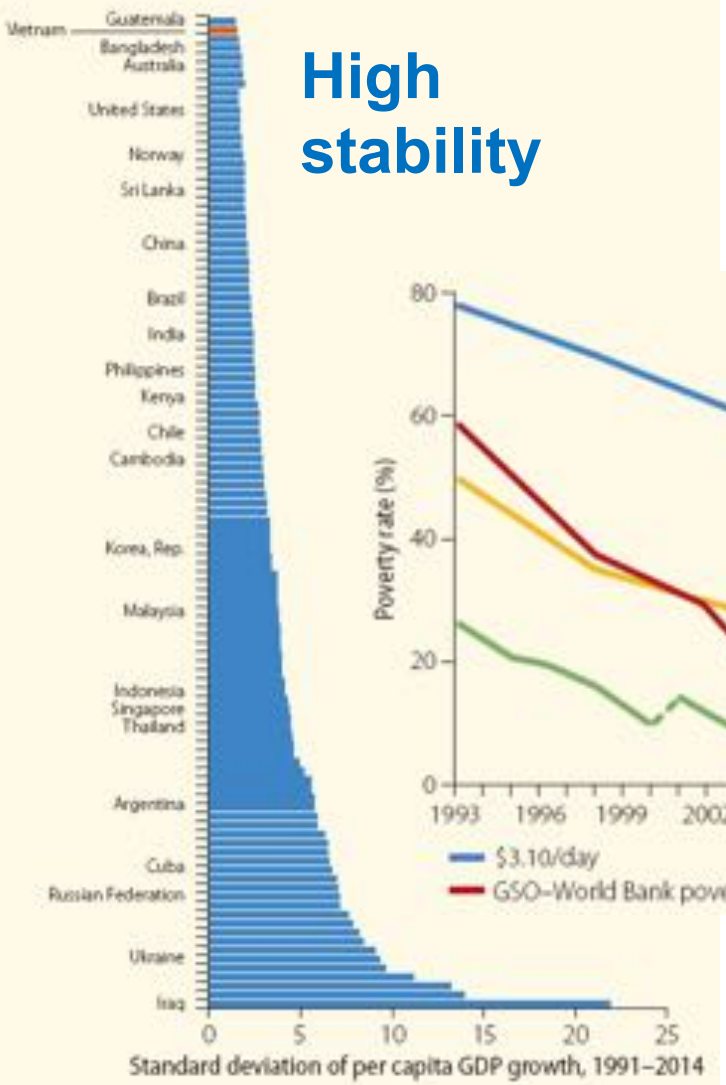


(IPSARD 2016)

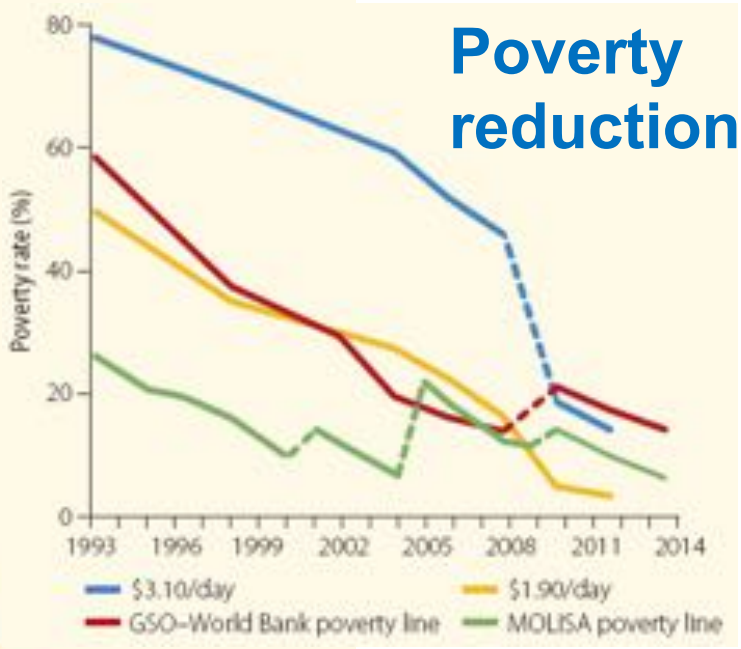
Good news for the country



High GDP growth



High stability



Poverty reduction

(World Bank & MPIV 2016)

Success factors?

- growing global demand for agricultural raw materials and both staple and higher value foods
- diverse agro-ecological conditions , tropical to temperate, varied soil types
- good proximity to markets in rapidly growing middle income countries (e.g. Japan, Singapore, Malaysia)
- improved domestic environment for business and investment
- entry into trade agreements , e.g. WTO and TPP
- …and large international aid inputs

UNE links with Vietnam – agriculture

Plant production

- rice, vegetables (various)
- forest management (north, centre)
- coffee, tea-tree, med. plant cultivation

Soil science

- improving sandy soils (central coast)
- biochar in rice soils, LCA (north)
- pollution remediation, adaptation (south)

Animal production, aquaculture

- beef, dairy, poultry, pigs (various)
- fin fish, shrimps, shellfish, other taxa

UNE links with Vietnam – environment

Environmental science

- climate change impacts on mangroves
- waste management, utilisation, energy
- soil and water quality monitoring and remediation
- recording and maintaining biodiversity
- land use planning, GIS/RS

Policy and governance

- forest management and benefit sharing for ecosystem services (north, centre)
- weed risk assessment & quarantine (north)

UNE links with Vietnam – agribusiness

Supply chain analysis

– demand/supply for beef market (HCMC)

– value chain for essential oil (central coast)

Industry development

– high-value crops/products (north, centre)

– extension adoption of agroforestry (north, centre)

– alternative income generation, e.g. tourism (north, centre)

Case study 1: Mekong Delta

Mekong Delta: cropping issues

Pests & diseases

Soil fertility

Water

System design

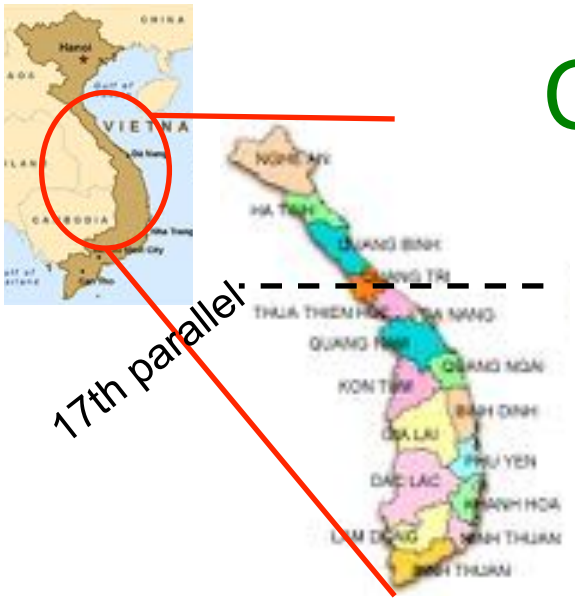
GHG emissions

Mekong Delta: polycultures

Mekong Delta: floriculture

Mekong Delta: integrated livestock

Case study 2: Central coast



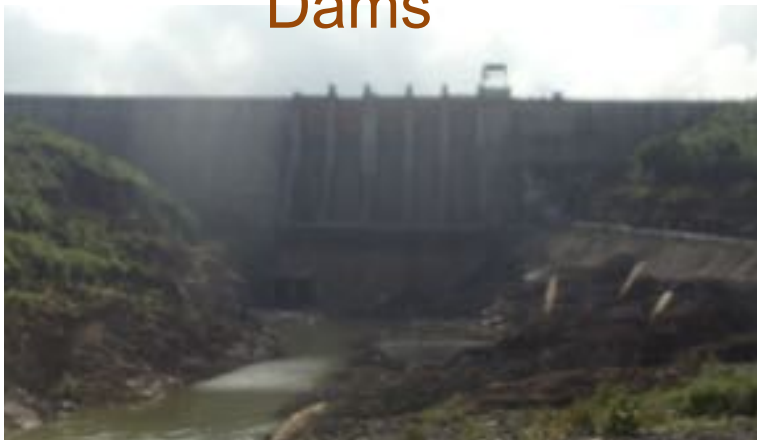
Central coast: land use change

Urban spread…

more good soil…

for a few kms.

Dams



Land clearing

Urban gardening

Central coast: agroforestry

Central coast: medicinal plants

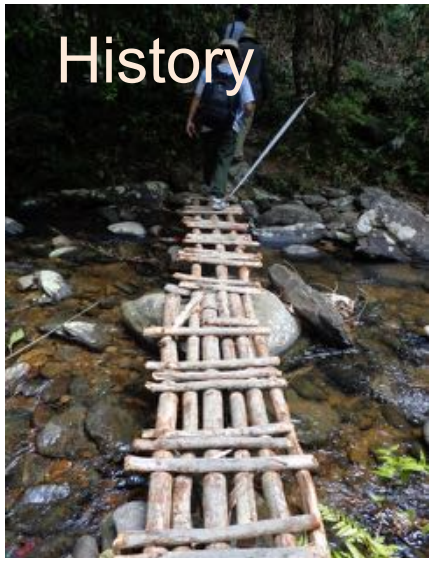
Distill

Agarwood

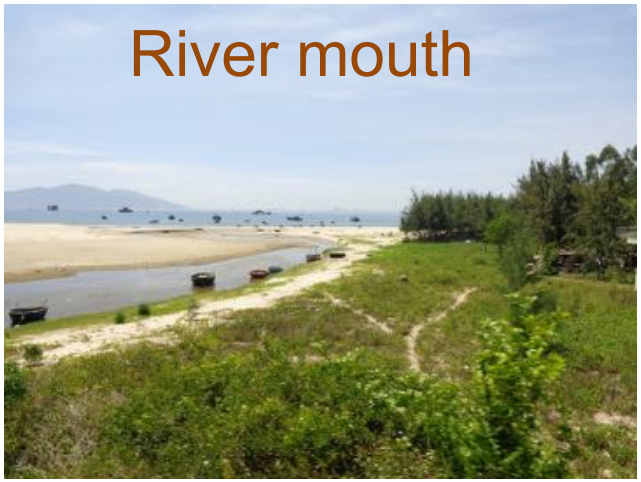
Cajuput (tea tree)

University of New England

Central coast: natural resources



Central coast: coastal resources



Case study 3: Northern region

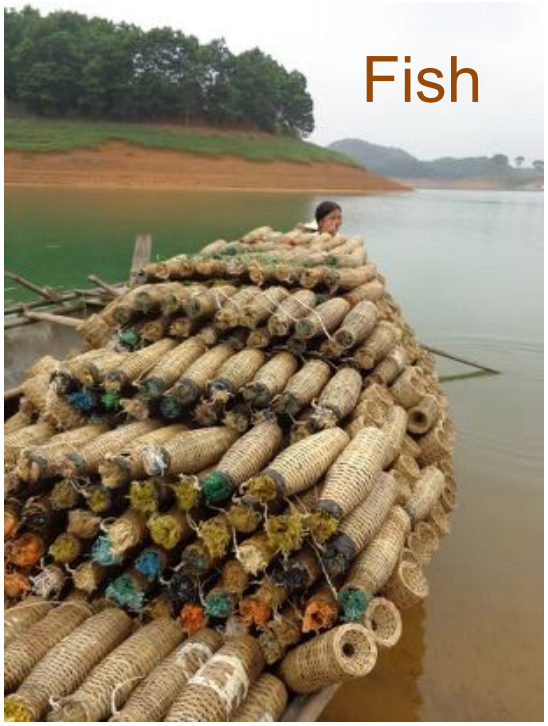
Hydro-power

Rice

Corn

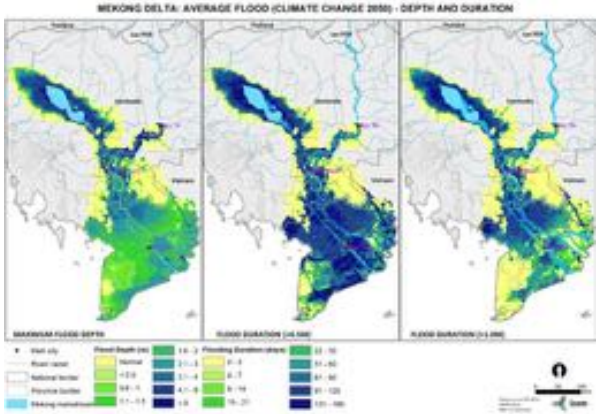
Northern region: crops

Northern region: integrated livestock



Northern region: households & livelihoods

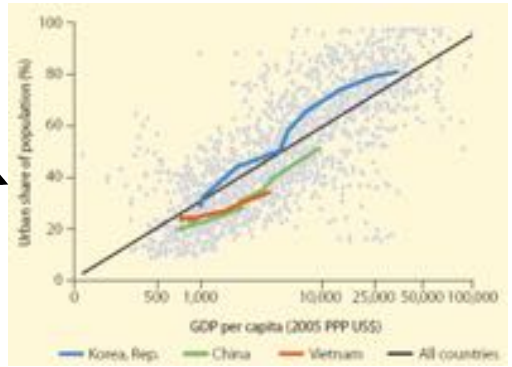
Challenges for Vietnam – biophysical



- yields
  - high for rice and coffee
  - pests & diseases problems (all crops)
- coast is vulnerable to climate change
  - Mekong Delta: large, key economic zone
  - long coastline: also important economically, socially
- industry development, e.g. aquaculture, beef, dairy
- quality: mostly low quality + poor QA throughout supply chain

Challenges for Vietnam – prod'n systems

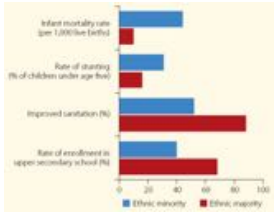
- food safety: soil contamination, unsafe practices, lax regulation
- resource degradation: water, soil, biodiversity, urbanisation



(IPSARD 2016, World Bank & MPIV 2016)

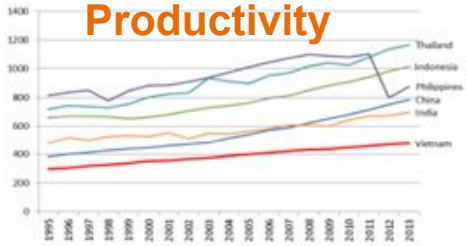
Challenges – socio-economic

Ethnic disadvantage



- migration: urban drift, southern drift …
  6.6% in Hanoi, >30% Greater HCMC
- labour: cost, availability, productivity, urbanised, ageing

Productivity



- food safety, certification systems, e.g. VietGAP
- ethnic and gender inequality
- low quality, no QA, no branding → low profitability
- investment, capital & infrastructure (F&V, meat)
- competition from neighbouring countries

(IPSARD 2016)

Challenges for Vietnam - governance

Financial system? World Bank & MPIV (2016) report recommended,

1. merit-based bureaucracy
2. market-based economic policy-making
3. stronger state accountability, vested interests

R&D and Higher Ed? signatures and silos

- moderate human capacity, but limited English
- limited facilities and equipment
- easy networking within a ‘silo’

(World Bank & MPIV 2016)

Constraints on RD&E people

- lack of autonomy and career incentives
- no extra financial support for staff working with international organizations (Dang Kim Son, Director, Inst for Policy & Strategy of Ag & Rural Dvlpmt)
- experienced scientists with insufficient foreign language skills found it hard to work with foreign partners, while junior scientists with the requisite abilities lacked experience (Vu Van Liet, Hanoi Ag Uni)

Need more time, money, English, support, knowledge, …

(World Bank & MPIV 2016, www.vnbusinessreg.com/vietnams-agricultural-burner)

Recent ACIAR activities in Vietnam

- ~$4.5 million spent in Vietnam

Previous priorities

– climate change resilient rice-based farms in Mekong Delta

– profitable and sustainable farming in south-central coast

– smallholder market engagement in north-western highlands

– high-value aquaculture

– higher-value plantation forestry products

climate-related impact and adaptation policy

New priorities

– climate change, high-value products, empowering women, private sector engagement

Other recent activities

- numerous universities, govt dept linkages, e.g. UNE, UQ, CSU, UTas, UAdel, Murdoch, etc.
- interest in UG and PG courses
- RUN trip: VN-AU cooperation, latest developments
- Austrade: Showcase, trade barriers, industry engagement

- other support: Mỹ Thuận Bridge, Mekong Rvr (2000)
- also: Japan, Germany, Israel, etc.