CONSTRAINTS AND OPPORTUNITIES FOR CERTIFICATION OF SMALLHOLDER SHRIMP AND PRAWN AQUACULTURE IN BANGLADESH

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Content

1. Need for small-scale producer certification
2. Bangladesh shrimp/prawn certification constraints & history
3. Case-study: the Organic Shrimp Project (OSP)
4. On-going value chain initiatives & challenges
5. Conclusions

Background

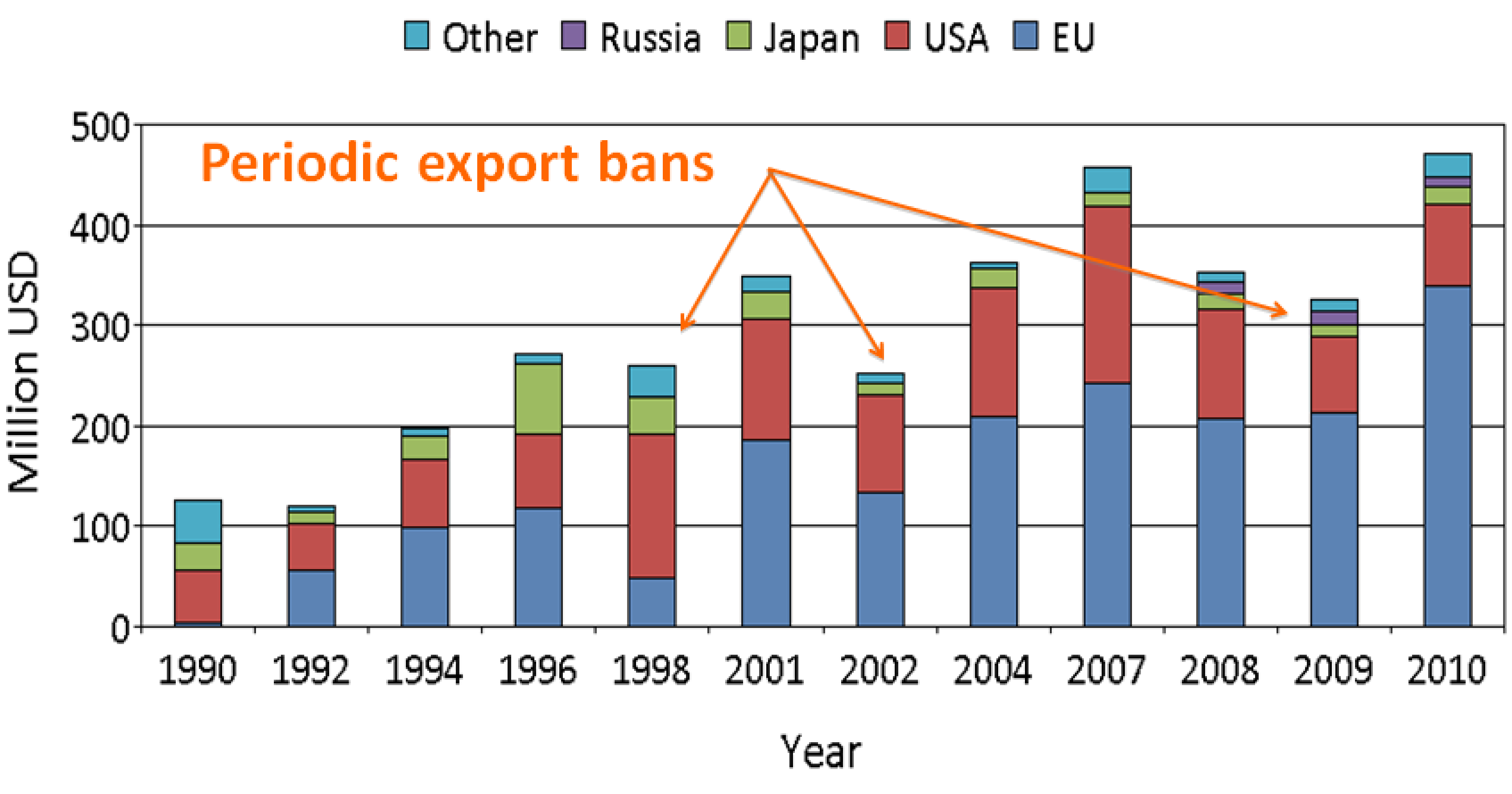
- Net flows farmed seafoods developing to developed countries
- Increasingly subject to 3rd party market-based standards
- Small farmers less able to afford compliance costs
- Certification as driver of industry consolidation?
- Options?
  - Group certification schemes (GlobalGAP, BAP, ASC)
  - Producer premiums in niche markets (Fair trade, organic)
  - Export sector withdrawal/ redeployment?

Bangladesh as a trade outlier?

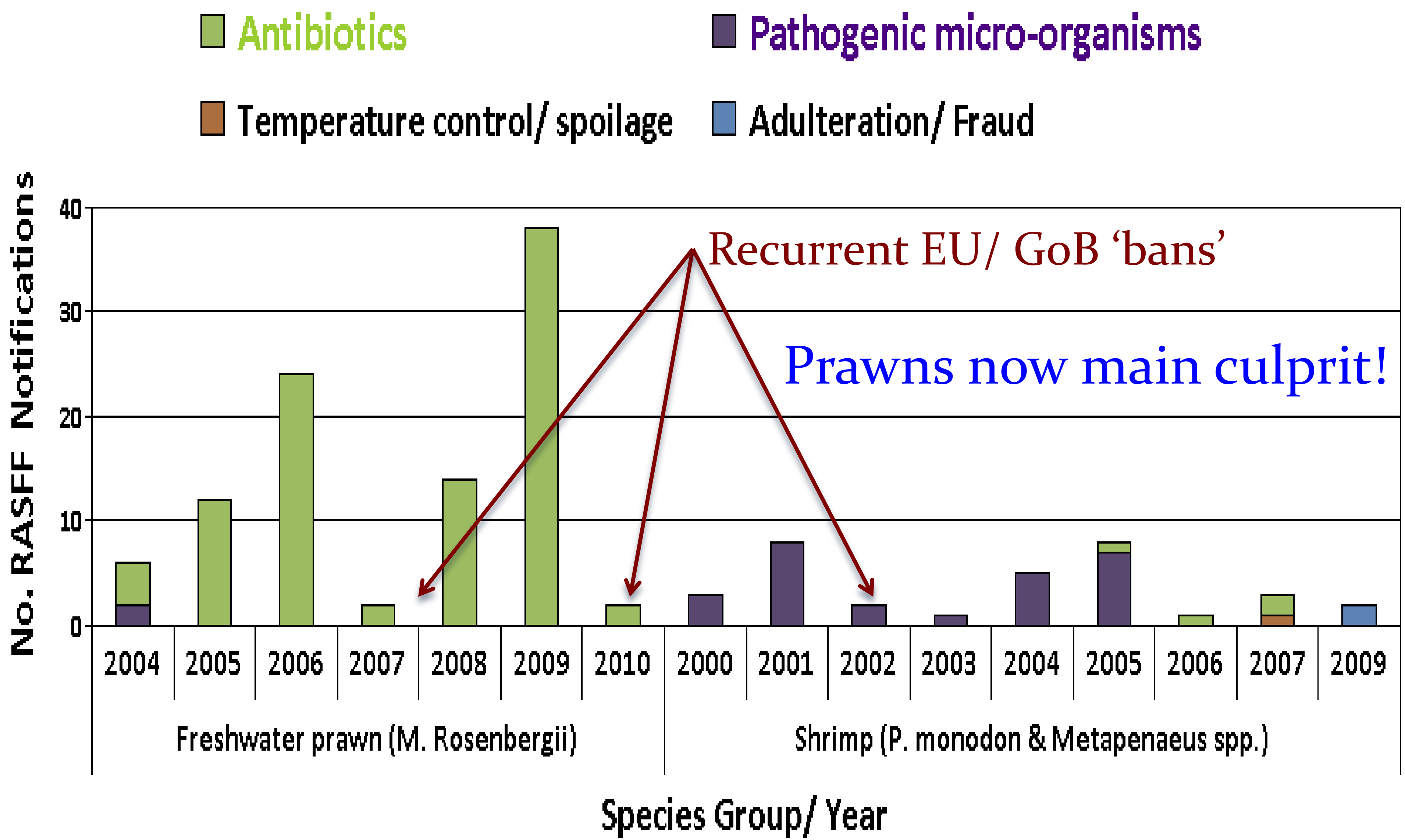
- >200,000 farms (?) <0.5ha - cf. Thailand <30,000
- Shrimp yield 0.2-0.8t/ha - cf. Thailand 6-10t/ha
- 97% exported: 70% shrimp & 30% prawn
- 4% GDP; 1.2 mill jobs & 4.8 million dependents


Semi-intensive prawn, fish, rice, dyke crops
Rural Auction
Depots
Informal transport
Shrimp, Prawn, fish, rice, dyke crops
Extensive & semi-intensive shrimp, fish in ponds
Processing: (No vertical integration)

Value of shrimp & prawn exports (USD) by export market 1990-2010



Recurrent export bans (RASFF 2000 – 2010)



Traceability challenges

- Bad image! most EU imports to low-end food service
- A traceability system addressing needs & capacities of small-scale producers needed to compete in higher-value markets
- But persistent problems post harvest & pre-processing
  - weight adulteration (‘pushing & soaking’)
  - weights & measures
- Value-chain shortening?

Traceability challenges at farm level

- Small unit transaction size (<10kg!)
  - Small farm size & low yields
  - 'Micro-harvesting' on natural lunar cycles ('goans')
- 2010: DoF/ UNIDO farm registration scheme
  - 175,000 farms registered (90% of total)?
  - Lack of personnel and data management capacity
  - NGO collaboration or best guess…
  - Updating - dynamic leasing & insecure property rights

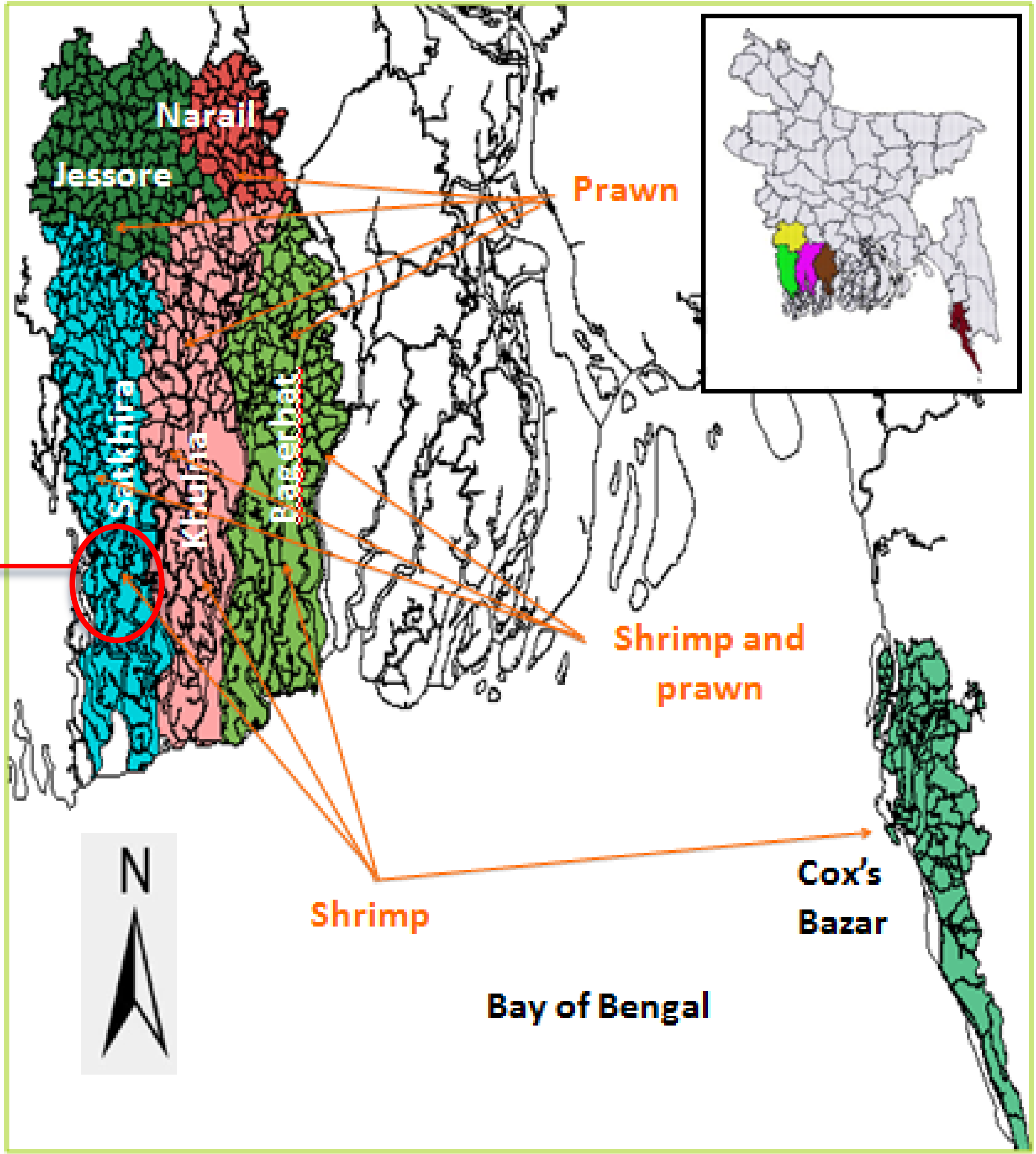
Previous certification initiatives

- 2001-2005 USAID/GOB **Shrimp Seal of Quality (SSQ)**
- 1998-2006 **Noakhali Gold Prawn (GNEAP)**
- **2010-2012 FairTrade shrimp standard**
- No certified exports…!

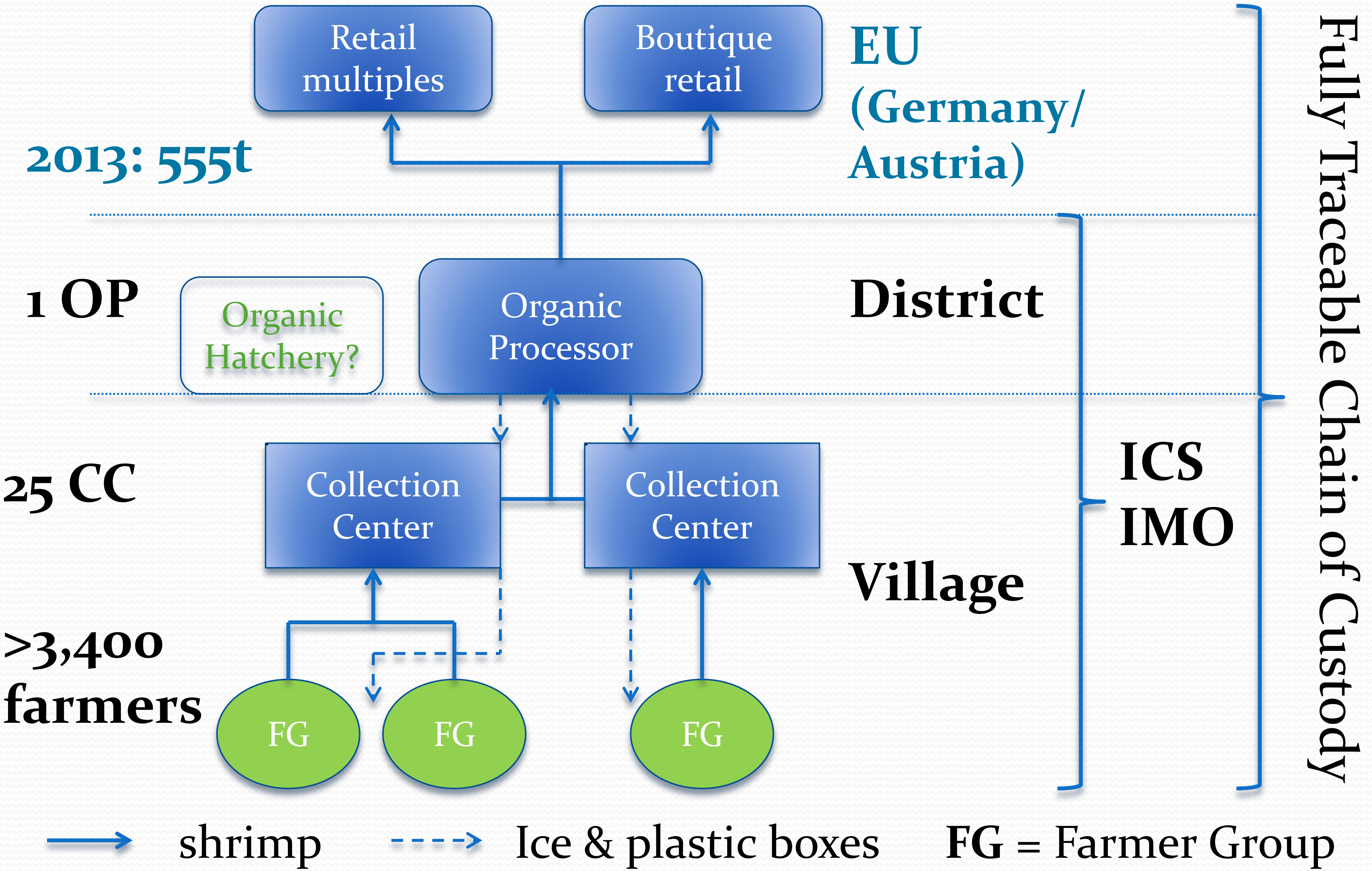
Organic Shrimp Project

- 2005-2007 Swiss Import Promotion Programme (SIPO),
  - local NGO ‘Shushilan’ &
  - WAB Trading Int. Asia Ltd (German importer)
- WAB-OSP operated for 6yrs: 2008-2014
- Last proc Oct 2013, >100 staff laid-off 24th Mar 2014
- Naturland (group) organic certification
- Yearly external 3rd party audit by IMO Switzerland
- Parallel operation in West Bengal, India

Organic Shrimp Project



Organic Shrimp Value Chain



Innovations (1): Internal Control System (ICS)

- 47 training & inspection staff – farm to factory – regular rotation
- Farmer registration (GPS boundary mapping)
- No organic feed; composting only (productivity limit)
- No wild sourced seed
- Failed farmers excluded for 1 year


Organic Shrimp Project
Internal Control System (ICS)
WAB


Organic
Shrimp
Project

Innovations (2): De-centralised cluster approach

- Reduced externalities e.g. chemical use
- Social reinforcement of rule adherence
- Short distance to collection centers (<3km) and local proc. plant (max 3hrs)
- Eliminates spoilage/ adulteration risk between farm gate & conventional depots
- No requirement for assemblers (‘*farias*’) but creation of skilled service jobs in local communities
- Depots also act as village meeting places

Innovations (3): Business model

- Group certification
  - WAB (& processing partner) responsible for standard implementation – farmers responsible to WAB
- Organic price premium (>10%) retained by WAB to cover certification & traceable supply chain costs
- Offer prices fixed on *goans* to reflect EU retail demand/ forward contracts
- Certified farmers are free to sell elsewhere
  - Est. only 20-50% of certified production is sold to WAB

OSP farmer incentives?

- Near farm-gate uplift
- Rapid payment; cash within 2 days of harvest
- Transparent process – accurate weights etc.
- Support to increase farm productivity (within extensive limits)
  - Extension services e.g. fertilization techniques
  - Quality PL provision (hatchery development)

Eventual economic failure?

- High costs - group certification & chain of custody
- Processing & distribution over-capacity
  - 2010: 113t 2013: 555t
  - Processing capacity
    - Block frozen 7,300t/yr (20t/day) i.e. 10%
    - IQF (cooked) 16mt/ day
- Insufficient demand for premium product?
  - Low differential between WAB and ‘none-organic’ price

On-going value-chain initiatives (1)

- 2010-2014 UNIDO: Better fisheries quality (BEST BFQ)
- 2011-2016 WFC: Aquaculture for income & nutrition
- 2012-2016 Solidaridad: Sustainable aquaculture food security & linkages (SAFAL)
- 2014-?? FAO,WFC,DOF: Standards & trade development facility (STDF)

On-going value-chain initiatives (2)

- All have traceability enhancement components inc:
  - Supply chain shortening
  - Increasing farm productivity
  - Formation of producer groups
  - Processors/ depots as lead organisations

- But currently no other 3rd party certification initiatives?

Potential problems

- Production intensification
  - Biosecurity investments & exclusion of smaller farmers?
- Market failures at processor level
  - ‘Black subsidies’ contributing to over-capacity
  - 10% export subsidy
  - ‘Account holder’ value-chain financing system which limits processor risk creates mal-investment incentives
- Demand?
  - Poor linkage with EU & other buyers
  - Promotion?

Conclusions (1)

- OSP economically unsustainable due to high certification transaction costs & modest demand for premium products
- But: demonstrated fully traceable chain of custody to enable small-scale certification is possible in a weak regulatory environment & fragmented VC context
- key innovations to be considered in future efforts:
  - Decentralised approach
  - Price fixing system
  - Internal control system (ICS)

Conclusions (2)
Up-scaling?

- Attributes more scalable than niche organic certification?
  - Endemic species (WAB: *P. monodon* 90%, Other Sp. 10% *M. monoceros, P. Indicus*)
  - Large sized individual shrimp
  - Raised at low density on natural feed in ponds
  - Attributes similar to ‘free-range’ poultry in the West

Thank You

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