

# Cultivating opportunity: Building a high quality fresh produce supply chain in PNG



17 May 2016

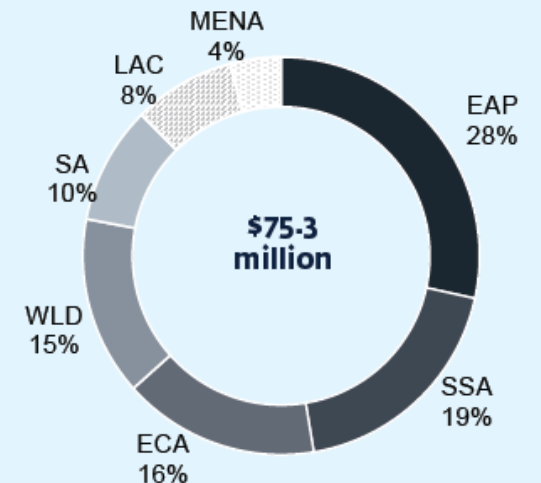
# IFC, Manufacturing, Agribusiness and Services

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- IFC is the largest development institution focused exclusively on the private sector
- IFC is both an investor and advisor for agribusiness companies around the world
- \$75 million agribusiness advisory portfolio
- 66 client engagements, chiefly in East Asia and Africa
- 1 project in Pacific: PNG Agribusiness

## MAS Advisory in Numbers

Portfolio | as of February 2016



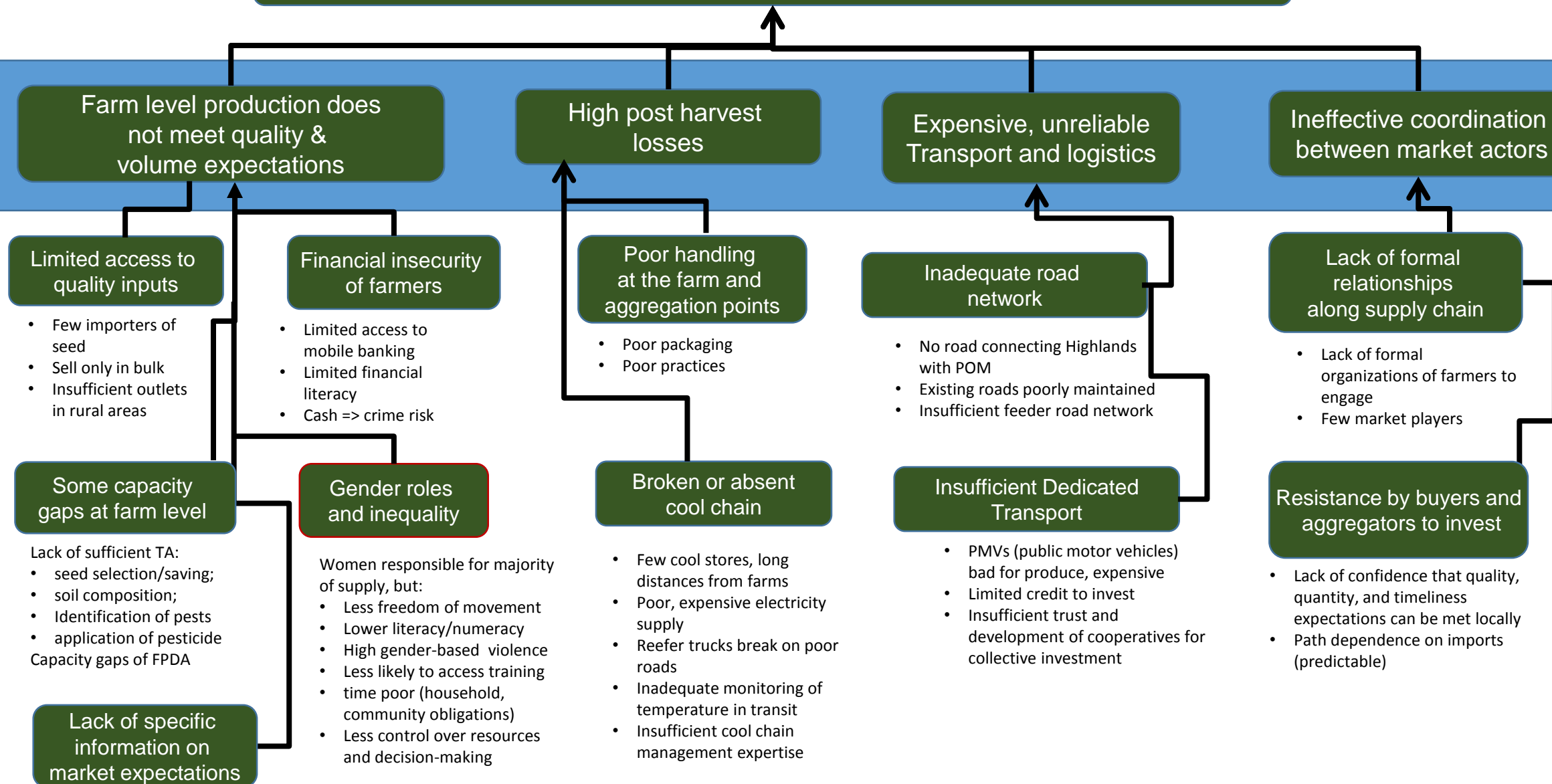
# PNG Rationale and problem analysis

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- More than 80% of PNG population dependent on agriculture for livelihoods
- Identification of a committed “lead firm” in the fresh produce sector
- Women are responsible for a majority of fresh produce supply
- IFC research showed that a number of critical issues lead wholesalers to source high quality fresh produce from abroad:
  - High post-harvest losses
  - Expensive, unreliable transport and logistics
  - Farm-level production does not meet quality and volume expectations
  - Ineffective coordination between market actors



## Wholesale market players source high quality fresh produce from abroad



Reliable High Quality Fresh Produce for Domestic Modern Markets

Farm level production meets quality & volume expectations

Post harvest Losses are minimal

Efficient transportation is available

Market players coordinated

High quality inputs available

- Partnership with suppliers
- Use chain in reverse for delivery

New GAP adopted as needed

- 'On demand' farmer advisory services functioning (in person and ICT)

Market specifications relayed to farmers

- Feedback loops from market to farm established (ICT; info at depots, trainers, farmer showcase)

Improved financial security for farmers

- Mobile bank accounts
- Trained on farm finance and budgets

Evolution in gender roles towards greater equality

Women responsible for majority of supply and:

- Have access to safe transport
- received literacy and financial training,
- Increasingly taking on leadership roles
- Face reduced risk of violence

Men share in farming and household and social responsibilities

Good handling at the farm and aggregation points

- Packaging appropriate to location and product is available and used
- District depots fitted out

Cool chain established

- District level depots (not cooled)
- Aggregator provides scheduled, timely transport to main cool store
- Functioning cool store available and sufficient size, design for purpose
- Sufficient electricity supply
- Improved and monitored reefer trucks drive to ports
- All containers equipped with temperature sensors and real time data to buyers.
- Good cool chain practices adopted

Distance from farm minimized

- District level depots => shorter distance on expensive transport and poor roads in poor vehicles

Dedicated produce transport available

- Aggregator invests in transport (initially)
- Trust and organization of cooperatives develops allowing collective investment

Road network improved

- Over time:
- Highlands Highway connected to POM
  - Roads better maintained
  - More feeder roads new more farms

Integrated, privately operated supply chain

- Contracts established between aggregators and wholesalers
- System for registering farmers established and functioning.
- Farmer organizations emerge and mature
- Improved feedback from market to farm (ICT), including price
- Advance orders facilitate crop planning
- Retailer promotes local produce and individual farmers in stores (photos, stories, contests)



# PNG Agribusiness project activities

## Component 1: Farmer Capacity Building

### Farmer Advisory Service

- Production/quality
- Soil testing & advice
- Crop planning
- Post harvest management
- Farm business record-keeping
- "On-demand" in person at depot; via mobile phone
- Specialists, as needed eg Citrus

### Farmer Organisation Strengthening

- Farm registration/Database (GPS Map)
- Organisation development
- Banking/Financial literacy
- Leadership (women & men)
- Gender roles; gender-based violence

### Inputs & Postharvest

- Open pollinated seed selection training, seed bank & exchange
- Bulk access to imported seed using chain in reverse for delivery
- Packaging (will test: recyclable crates & bins; breathable sacks, etc.)

## Component 2: Lead Firm Market and Cool Chain Advisory

### ICT

- Trackability & traceability systems
- Market feedback loops
- Real-time temperature sensors
- FAQ & Hotline (Phase 2?)
- Links to pestnet.com, through advisors
- Production calculator App, available through advisors
- Produce photo records of market out-turns available via Advisor smart phone

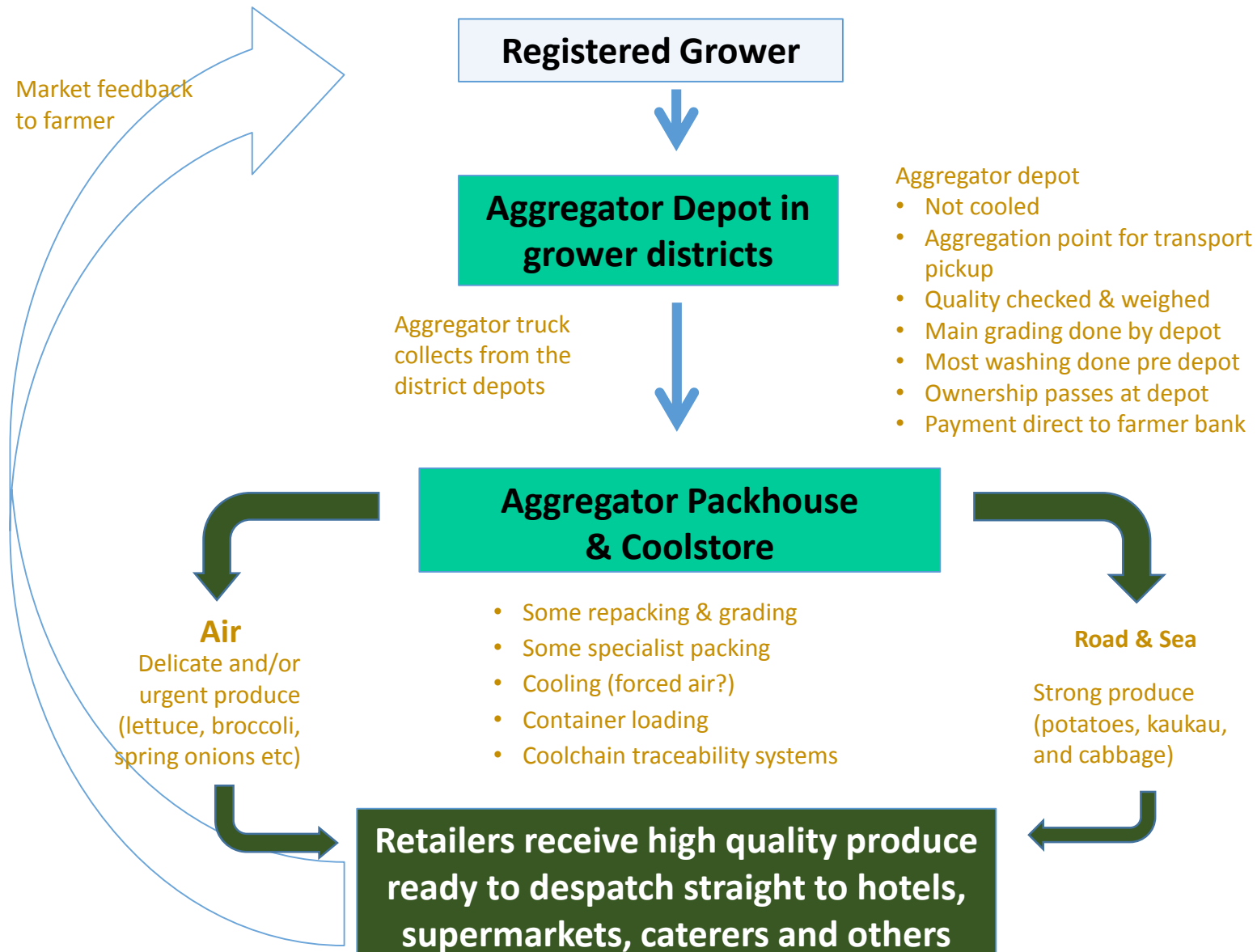
### Coolchain advisory

- Trackability & traceability systems
- Container packing and monitoring
- Despatch records, including electronic quality records
- Market feedback loops
- Real-time temperature sensors

# ANNEX

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# PNG Agribusiness project structure





# PNG Agribusiness project targets 2015-2018

## OUTPUT: Supply chain solutions advised

- 10 Trainers trained
- 38 Workshops and training events
- 5 diagnostics/reports produced
- 2 lead firms advised
- 3 procedures/policies proposed for improvement or elimination



## OUTCOME: Supply chain performance and communication strengthened

- 2 lead firms adopting recommendations
- 3,500 women trained by IFC trained people and or institutions
- 10,000 people accessing agricultural technologies
- 10,000 farmers reached (70% women)



## IMPACT: Economic empowerment of women in PNG Fresh Produce Supply Chain

- 10,000 farmers improved performance (quality and income); 70% women